=> d que 160

L6

STR

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VAR G2=N/C

VAR G3=C/O

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NODE ATTRIBUTES:

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DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:

RSPEC I

NUMBER OF NODES IS 16

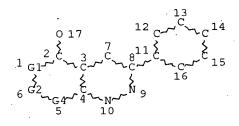
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941 SEA FILE=REGISTRY SSS FUL L6

L57

STR



REP G1 = (0-3) CH2

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DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:

RSPEC I

NUMBER OF NODES IS 17

STEREO ATTRIBUTES: NONE

L59 168 SEA FILE=REGISTRY SUB=L8 SSS FUL L57

16 SEA FILE=HCAPLUS ABB=ON PLU=ON L59

=> d que 156

L6

STR

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GRAPH ATTRIBUTES:

RSPEC I

NUMBER OF NODES IS 16

STEREO ATTRIBUTES: NONE

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L13	11	SEA FILE=HCAPLUS ABB=ON PLU=ON L12 AND THU/RL
L14	13	SEA FILE=HCAPLUS ABB=ON PLU=ON L11 AND THU/RL
L15	13	SEA FILE=HCAPLUS ABB=ON PLU=ON (L13 OR L14)
L16	105	SEA FILE=HCAPLUS ABB=ON PLU=ON L12 AND (1840-2002)/PRY,AY
		, PY
L17		QUE ABB=ON PLU=ON "ANTITUMOR AGENTS"+PFT,NT,OLD/CT
L18	1	SEA FILE=HCAPLUS ABB=ON PLU=ON L16 AND L17
L19	2	SEA FILE=HCAPLUS ABB=ON PLU=ON L11 AND L17
L20		QUE ABB=ON PLU=ON CANCER? OR CARCINOMA? OR MELANOMA? O
		R NEOPLAS? OR TUMOR? OR TUMOUR? OR MALIGNAN? OR SARCOMA?
L21	6	SEA FILE=HCAPLUS ABB=ON PLU=ON L11 AND L20
L22	16	SEA FILE=HCAPLUS ABB=ON PLU=ON L15 OR (L18 OR L19) OR
		L21
L23	8	SEA FILE=HCAPLUS ABB=ON PLU=ON L11 AND PAC/RL
L24	16	SEA FILE=HCAPLUS ABB=ON PLU=ON L22 OR L23
L55	7	SEA FILE=HCAPLUS ABB=ON PLU=ON L16 AND PHARM?/SC,SX
L56	18	SEA FILE=HCAPLUS ABB=ON PLU=ON L24 OR L55

L6 STR

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NUMBER OF NODES IS 16
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L11
          287 SEA FILE=HCAPLUS ABB=ON PLU=ON KUROIWA, S?/AU
L25
            6 SEA FILE=HCAPLUS ABB=ON PLU=ON ODANAKA, J?/AU
L26
            23 SEA FILE=HCAPLUS ABB=ON PLU=ON MARUYAMA, SAKIKO?/AU
L27
         13838 SEA FILE=HCAPLUS ABB=ON PLU=ON SATO, Y?/AU
L28
            1 SEA FILE=HCAPLUS ABB=ON PLU=ON TOMURA, A/AU
L29
         15467 SEA FILE=HCAPLUS ABB=ON PLU=ON SATO, H?/AU
L30
         18718 SEA FILE=HCAPLUS ABB=ON PLU=ON SUZUKI, Y?/AU
L31
             2 SEA FILE=HCAPLUS ABB=ON PLU=ON L11 AND ((L25 OR L26 OR
L32
               L27 OR L28 OR L29 OR L30 OR L31))
=> d que 142
               QUE ABB=ON PLU=ON KUROIWA, S?/AU
L33
               QUE ABB=ON PLU=ON ODANAKA, J?/AU
L34
               QUE ABB=ON PLU=ON SATO, Y?/AU
QUE ABB=ON PLU=ON MARUYAMA, SAKIKO?/AU
L35
L36
               QUE ABB=ON PLU=ON TOMURA, A/AU
L37
              QUE ABB=ON PLU=ON SATO, H?/AU
L38
              OUE ABB=ON PLU=ON SUZUKI, Y?/AU
L39
            O SEA FILE=MEDLINE ABB=ON PLU=ON ((L33 OR L34 OR L35 OR
L42
               L36 OR L37 OR L38 OR L39)) AND CINNOLIN?
=> d que 151
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L43
            8 SEA ODANAKA, JUNKO?/AU
L44
           27 SEA MARUYAMA, SAKIKO?/AU
L45
          596 SEA SATO, YOSHITAKA?/AU
L46
           19 SEA TOMURA, ARIHIRO?/AU
L47
         9305 SEA SATO, HIROSHI?/AU
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          806 SEA SUZUKI, YOSHIKAZU?/AU
L49
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L51
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GRAPH ATTRIBUTES:

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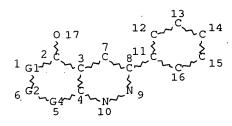
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L8

941 SEA FILE=REGISTRY SSS FUL L6

L57

STR



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RSPEC I

NUMBER OF NODES IS 17

STEREO ATTRIBUTES: NONE

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L62 O SEA FILE=MARPAT ABB=ON PLU=ON L61 NOT L60

=> d que 163

L6 STR

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GRAPH ATTRIBUTES:

RSPEC I

L55

L56 L57

NUMBER OF NODES IS 16

STEREO ATTRIBUTES: NONE

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L8
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L12
            11 SEA FILE=HCAPLUS ABB=ON PLU=ON L12 AND THU/RL
L13
                                       PLU=ON L11 AND THU/RL
            13 SEA FILE=HCAPLUS ABB=ON
L14 ·
                                               (L13 OR L14)
            13 SEA FILE=HCAPLUS ABB=ON
                                       PLU=ON
L15
           105 SEA FILE=HCAPLUS ABB=ON
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L16
               , PY
                                   "ANTITUMOR AGENTS"+PFT,NT,OLD/CT
L17 .
               QUE ABB=ON PLU=ON
             1 SEA FILE=HCAPLUS ABB=ON PLU=ON L16 AND L17
L18
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L19
               OUE ABB=ON PLU=ON CANCER? OR CARCINOMA? OR MELANOMA? O
L20
               R NEOPLAS? OR TUMOR? OR TUMOUR? OR MALIGNAN? OR SARCOMA?
             6 SEA FILE=HCAPLUS ABB=ON PLU=ON L11 AND L20
L21
             16 SEA FILE=HCAPLUS ABB=ON PLU=ON L15 OR (L18 OR L19) OR
L22
               L21
             8 SEA FILE=HCAPLUS ABB=ON
                                       PLU=ON L11 AND PAC/RL
L23
                                       PLU=ON
                                               L22 OR L23
L24
             16 SEA FILE=HCAPLUS ABB=ON
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PLU=ON

PLU=ON L24 OR L55

L16 AND PHARM?/SC,SX

7 SEA FILE=HCAPLUS ABB=ON

18 SEA FILE=HCAPLUS ABB=ON

STR

REP G1=(0-3) CH2 VAR G2=N/C REP G4=(0-4) C NODE ATTRIBUTES:

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DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:

RSPEC I

NUMBER OF NODES IS 17

STEREO ATTRIBUTES: NONE

L59

168 SEA FILE=REGISTRY SUB=L8 SSS FUL L57

L60

16 SEA FILE=HCAPLUS ABB=ON PLU=ON L59

L63

13 SEA FILE=HCAPLUS ABB=ON PLU=ON L56 NOT L60

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E1 THROUGH E144 ASSIGNED

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L60 ANSWER 1 OF 16 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER:

2005:1329720 HCAPLUS Full-text

DOCUMENT NUMBER:

144:69841

TITLE:

Preparation of 3-phenyltetrahydrocinnolin-5-ol

derivatives as antitumor agents

INVENTOR(S):

.Sato, Yoshitaka; Suzuki, Yoshikazu; Yamamoto,

Keiichiro; Kuroiwa, Shunsuke; Maruyama, Sakiko

PATENT ASSIGNEE(S):

Nippon Kayaku Kabushiki Kaisha, Japan PCT Int. Appl., 41 pp.

SOURCE:

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

Japanese

FAMILY ACC. NUM. COUNT: 3

PATENT INFORMATION:

PAT	PATENT NO.					KIND DATE			APPLICATION NO.						DATE		
WO.	2005121105				A1 20051222			WO 2005-JP10494						20050608			
		AE,														CA,	
							CZ,										
		GB,	GD,	GE,	GH,	GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KE,	KG,	KM,	
•		KP,	KR,	KZ,	LC,	LK,	LR,	LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	
		MW,	MX,	MZ,	NA,	NG,	NI,	NO,	NZ,	OM,	PG,	PH,	PL,	PT,	RO,	RU,	
		SC,	SD,	SE,	SG,	SK,	SL,	SM,	SY,	TJ,	TM,	TN,	TR,	TT,	TZ,	UA,	
•		UG,	US,	UZ,	VC,	VN,	YU,	ZA,	ZM,	zw							
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		AM,	ΑZ,	BY,	KG,	KZ,	MD,	RU,	TJ,	TM,	AT,	BE,	BG,	CH,	CY,	CZ,	
	•				•		FR,		-	-	-						
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PRIORITY	RIORITY APPLN. INFO.:								JP 2004-171426					. 7	· A 20040609		

OTHER SOURCE(S):

MARPAT 144:69841

GΙ

$$\begin{array}{c|c} z & & \\ \hline \end{array}$$

Title compds. I [Z = M-, L(L')N-, A(B)CH-; M = alkoxy, alkylamino, optionally substituted alkyl with saturated heterocycle; L, L' = hydroxy, alkoxy, carboxy, etc.; A = H, hydroxy, alkyl; B = substituted alkyl, alkoxy, carboxy, etc.; X = alkyl, alkoxycarbonyl, acylamino, etc.; X' = alkyl, alkoxycarbonyl, acylamino, etc.; Y, Y' = H, alkyl] were prepared For example, EDC mediated acylation of 7-methyl-3-(3- trifluoromethylphenyl)-5,6,7,8-tetrahydrocinnolin-5-ol, e.g., prepared from 3'-trifluoromethylacetophenone in 5 steps, with ethoxyacetic acid afforded compound II in 98.8% yield. In antitumor assays in vitro, the IC50 value of compound II was 0.135 μ g/mL. Compds. I are claimed useful for the treatment of tumor.

IT 871840-18-5P 871840-22-1P

(preparation of 3-phenyltetrahydrocinnolin-5-ol derivs. as antitumor agents)

RN 871840-18-5 HCAPLUS

CN Acetic acid, (carboxymethoxy)-, 1-[5,6,7,8-tetrahydro-7-methyl-3-[3-(trifluoromethyl)phenyl]-5-cinnolinyl] ester (9CI) (CA INDEX NAME)

RN 871840-22-1 HCAPLUS

CN Butanedioic acid, mono[5,6,7,8-tetrahydro-7-methyl-3-[3-(trifluoromethyl)phenyl]-5-cinnolinyl] ester (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} \text{Me} & \text{N} & \text{N} \\ \text{HO2C-CH2-CH2-C-O} \\ \end{array}$$

IT 871840-17-4P 871840-19-6P 871840-20-9P 871840-21-0P 871840-23-2P 871840-24-3P 871840-25-4P 871840-26-5P 871840-27-6P 871840-28-7P 871840-30-1P 871840-32-3P 871840-33-4P 871840-35-6P 871840-37-8P 871840-39-0P 871840-40-3P 871840-42-5P 871840-44-7P

(preparation of 3-phenyltetrahydrocinnolin-5-ol derivs. as antitumor agents)

RN 871840-17-4 HCAPLUS

CN Acetic acid, ethoxy-, 5,6,7,8-tetrahydro-7-methyl-3-[3-(trifluoromethyl)phenyl]-5-cinnolinyl ester (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} \text{Me} & \text{N} & \text{N} \\ \hline \\ \text{Eto-CH2-C-O} & \\ \end{array}$$

RN 871840-19-6 HCAPLUS

CN Acetic acid, [2-[[2-(4-morpholinyl)ethyl]amino]-2-oxoethoxy]-, 5,6,7,8-tetrahydro-7-methyl-3-[3-(trifluoromethyl)phenyl]-5-cinnolinyl ester (9CI) (CA INDEX NAME)

PAGE 1-A

RN 871840-20-9 HCAPLUS

CN

Acetic acid, [2-oxo-2-[(3-pyridinylmethyl)amino]ethoxy]-, 5,6,7,8-tetrahydro-7-methyl-3-[3-(trifluoromethyl)phenyl]-5-cinnolinyl ester (9CI) (CA INDEX NAME)

PAGE 1-A

PAGE 2-A

RN 871840-21-0 HCAPLUS

CN

Acetic acid, [2-oxo-2-[(4-pyridinylmethyl)amino]ethoxy]-, 5,6,7,8-tetrahydro-7-methyl-3-[3-(trifluoromethyl)phenyl]-5-cinnolinyl ester (9CI) (CA INDEX NAME)

PAGE 2-A

RN 871840-23-2 HCAPLUS

CN Pentanedioic acid, mono[5,6,7,8-tetrahydro-7-methyl-3-[3-(trifluoromethyl)phenyl]-5-cinnolinyl] ester (9CI) (CA INDEX NAME)

$$Me$$
 N
 N
 CF_3
 $HO_2C-(CH_2)_3-C-0$

RN 871840-24-3 HCAPLUS

CN Butanedioic acid, hydroxy-, 4-[5,6,7,8-tetrahydro-7-methyl-3-[3-(trifluoromethyl)phenyl]-5-cinnolinyl] ester (9CI) (CA INDEX NAME)

RN 871840-25-4 HCAPLUS

CN Butanoic acid, 4-(dimethylamino)-, 5,6,7,8-tetrahydro-7-methyl-3-[3-(trifluoromethyl)phenyl]-5-cinnolinyl ester (9CI) (CA INDEX NAME)

$$\begin{array}{c} \text{Me} \\ \text{Me}_{2}\text{N-} \text{(CH}_{2}\text{)} \text{3-C-} \\ \text{O} \end{array}$$

RN 871840-26-5 HCAPLUS

CN Propanedioic acid, mono[5,6,7,8-tetrahydro-7-methyl-3-[3-(trifluoromethyl)phenyl]-5-cinnolinyl] ester, monohydrochloride (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} \text{Me} & \text{N} & \text{N} \\ \text{HO}_2\text{C} - \text{CH}_2 - \text{C} - \text{O} \\ \end{array}$$

● HCl

RN 871840-27-6 HCAPLUS

CN Butanoic acid, 4-[[2-(4-morpholinyl)ethyl]amino]-4-oxo-, 5,6,7,8-tetrahydro-7-methyl-3-[3-(trifluoromethyl)phenyl]-5-cinnolinyl ester (9CI) (CA INDEX NAME)

PAGE 2-A

RN 871840-28-7 HCAPLUS

CN

Butanoic acid, 4-oxo-4-[(3-pyridinylmethyl)amino]-, 5,6,7,8-tetrahydro-7-methyl-3-[3-(trifluoromethyl)phenyl]-5-cinnolinyl ester (9CI) (CA INDEX NAME)

PAGE 1-A

RN 871840-30-1 HCAPLUS

CN Butanoic acid, 4-oxo-4-[(4-pyridinylmethyl)amino]-, 5,6,7,8-tetrahydro-7-methyl-3-[3-(trifluoromethyl)phenyl]-5-cinnolinyl ester (9CI) (CA INDEX NAME)

PAGE 1-A

PAGE 2-A

RN 871840-32-3 HCAPLUS

CN Butanedioic acid, methyl 5,6,7,8-tetrahydro-7-methyl-3-[3-(trifluoromethyl)phenyl]-5-cinnolinyl ester (9CI) (CA INDEX NAME)

$$\begin{array}{c} \text{MeO-C-CH2-CH2-C-O} \\ \text{MeO-C-CH2-CH2-C-O} \end{array}$$

RN 871840-33-4 HCAPLUS

CN Butanedioic acid, ethyl 5,6,7,8-tetrahydro-7-methyl-3-[3-(trifluoromethyl)phenyl]-5-cinnolinyl ester (9CI) (CA INDEX NAME)

RN 871840-35-6 HCAPLUS

CN Carbonic acid, 2-methoxyethyl 5,6,7,8-tetrahydro-7-methyl-3-[3-(trifluoromethyl)phenyl]-5-cinnolinyl ester (9CI) (CA INDEX NAME)

RN 871840-37-8 HCAPLUS

CN Carbonic acid, 2-(4-morpholinyl)ethyl 5,6,7,8-tetrahydro-7-methyl-3-[3-(trifluoromethyl)phenyl]-5-cinnolinyl ester (9CI) (CA INDEX NAME)

RN 871840-39-0 HCAPLUS

CN [1,4'-Bipiperidine]-1'-carboxylic acid, 5,6,7,8-tetrahydro-7-methyl-3-[3-(trifluoromethyl)phenyl]-5-cinnolinyl ester (9CI) (CA INDEX NAME)

RN 871840-40-3 HCAPLUS

CN 1-Piperidinecarboxylic acid, 4-(4-morpholinyl)-, 5,6,7,8-tetrahydro-7-methyl-3-[3-(trifluoromethyl)phenyl]-5-cinnolinyl ester (9CI) (CA INDEX NAME)

. RN 871840-42-5 HCAPLUS

CN 1-Piperidinecarboxylic acid, 4-methyl-, 5,6,7,8-tetrahydro-7-methyl-3-[3-(trifluoromethyl)phenyl]-5-cinnolinyl ester (9CI) (CA INDEX NAME)

RN 871840-44-7 HCAPLUS

CN 4-Morpholinecarboxylic acid, 5,6,7,8-tetrahydro-7-methyl-3-[3-(trifluoromethyl)phenyl]-5-cinnolinyl ester, monohydrochloride (9CI) (CA INDEX NAME)

TT 708984-56-9P, 7-Methyl-3-(3-trifluoromethylphenyl)-4,6,7,8tetrahydro-1H-cinnolin-5-one 708984-57-0P,
7-Methyl-3-(3-trifluoromethylphenyl)-7,8-dihydro-6H-cinnolin-5-one
708984-65-0P 871840-48-1P 871840-50-5P
871840-52-7P

(preparation of 3-phenyltetrahydrocinnolin-5-ol derivs. as antitumor agents)

RN 708984-56-9 HCAPLUS

CN 5(1H)-Cinnolinone, 4,6,7,8-tetrahydro-7-methyl-3-[3-(trifluoromethyl)phenyl]- (9CI) (CA INDEX NAME)

RN 871840-50-5 HCAPLUS

CN Carbonic acid, 2-chloroethyl 5,6,7,8-tetrahydro-7-methyl-3-[3-(trifluoromethyl)phenyl]-5-cinnolinyl ester (9CI) (CA INDEX NAME)

RN 871840-52-7 HCAPLUS

CN 1,3-Dioxolane-4-acetic acid, 2,2-dimethyl-5-oxo-, 5,6,7,8-tetrahydro-7-methyl-3-[3-(trifluoromethyl)phenyl]-5-cinnolinyl ester (9CI) (CA INDEX NAME)

IC ICM C07D237-26

ICS A61K031-502; A61K031-5377; A61P035-00; C07D401-12

CC 28-15 (Heterocyclic Compounds (More Than One Hetero Atom))
Section cross-reference(s): 1

IT 871840-18-5P 871840-22-1P

(preparation of 3-phenyltetrahydrocinnolin-5-ol derivs. as antitumor agents)

IT 871840-17-4P 871840-19-6P 871840-20-9P

871840-21-0P 871840-23-2P 871840-24-3P

871840-25-4P 871840-26-5P 871840-27-6P

871840-28-7P 871840-30-1P 871840-32-3P

871840-33-4P 871840-35-6P 871840-37-8P 871840-39-0P 871840-40-3P 871840-42-5P 871840-44-7P

(preparation of 3-phenyltetrahydrocinnolin-5-ol derivs. as antitumor agents)

ΙT 2003-10-3P, 2-Bromo-3'-trifluoromethylacetophenone 114458-03-6P 708984-56-9P, 7-Methyl-3-(3-trifluoromethylphenyl)-4,6,7,8tetrahydro-1H-cinnolin-5-one 708984-57-0P,

7-Methyl-3-(3-trifluoromethylphenyl)-7,8-dihydro-6H-cinnolin-5-one

708984-65-0P 708984-73-0P **871840-48-1P** 871840-50-5P 871840-52-7P

(preparation of 3-phenyltetrahydrocinnolin-5-ol derivs. as antitumor agents)

REFERENCE COUNT:

THERE ARE 3 CITED REFERENCES AVAILABLE FOR 3 THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L60 ANSWER 2 OF 16 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER:

2004:515490 HCAPLUS Full-text

DOCUMENT NUMBER:

141:71553

TITLE:

Preparation of 3-phenylcinnoline homologues as

antitumor agents

INVENTOR(S):

Kuroiwa, Shunsuke; Odanaka, Junko; Maruyama, Sakiko; Sato, Yoshitaka; Tomura, Arihiro; Sato,

Hiroshi; Suzuki, Yoshikazu

PATENT ASSIGNEE(S):

Nippon Kayaku Kabushiki Kaisha, Japan

SOURCE:

PCT Int. Appl., 68 pp. CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

Japanese

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

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	WO 2004052866					A1 20040624			WO 2003-JP15767						20031210				
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								CZ,											
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			KR,	KZ,	LC,	LK,	LR,	LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,		
			MX,	MZ,	NI,	NO,	NZ,	OM,	PG,	PH,	PL,	PT,	RO,	RU,	SC,	SD,	SE,		
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			MR,	NE,	SN,	TD,	TG												
	CA 2508010							2004											
	AU 2003289002					A1	•			AU 2003-289002									
	ΕP	P 1571148 `						EP 2003-778763											
		R:															MC,		
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	BR 2003017119									BR 2003-17119									
	CN 1735600									CN 2003-80108285									
	US 2006058305					A1	A1 20060316				US 2005-538126								
PRIO	PRIORITY APPLN. INFO.:										JP 2	002-	3575	56		A 2	0021210		
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A 20030627

WO 2003-JP15767

W 20031210

OTHER SOURCE(S):

MARPAT 141:71553

GΙ

RN CN

$$[\begin{array}{c|c} B & A & & \\ \hline \downarrow^{1}q & &$$

Title compds. I [A = 0-Y; Y = H, (un) substituted alkyl with Ph, etc.; B = H, alkyl, further details on A, B are given; L = N-W, W-C-W'; W, W' = (un) substituted alkyl, Ph, carboxyl, etc.; X = alkyl, alkoxycarbonyl, acylamino, etc.; X' = alkyl, alkoxycarbonyl, acylamino, etc.; m, q = 0-3; n, n' = 0, 1] and their physiol. acceptable salt were prepared In antitumor activity assays (in vitro) against breast cancer cell CF-7, compds. I showed IC50 values ranging from 0.0388 to 3.5700 μ g/mL, e.g., the IC50 value of compound I [A and B = carbonyl; L = PhCH; X = 3-CF3-Ph; X' = H; m = q = n = n' = 0] was 0.0388 μ g/mL. Compds. I are claimed useful as antitumor, cytostatic agents.

TO8983-93-1P 708983-95-3P, 5-Hydroxy-3-(3-trifluoromethylphenyl)-5,6,7,8-tetrahydrocinnoline-7-carboxylic acid ethyl ester 708983-98-6P 708984-00-3P 708984-07-0P, 3-(3-Cyanophenyl)-7-methyl-7,8-dihydro-6H-cinnolin-5-one 708984-20-7P 708984-23-0P 708984-25-2P 708984-27-4P 708984-31-0P 708984-33-2P 708984-35-4P 708984-37-6P 708984-39-8P 708984-41-2P 708984-44-5P

708984-46-7P 708984-47-8P 708984-49-0P

I

708984-53-6P 708984-56-9P, 7-Methyl-3-(3-

trifluoromethylphenyl)-4,6,7,8-tetrahydro-1H-cinnolin-5-one
708984-57-OP, 7-Methyl-3-(3-trifluoromethylphenyl)-7,8-dihydro-6H-cinnolin-5-one 708984-61-6P, 7-Methyl-3-(3-trifluoromethylphenyl)cinnolin-5-ol 709640-62-OP
709640-63-1P

(preparation of 3-phenylcinnoline homolog as antitumor agents) 708983-93-1 HCAPLUS

7-Cinnolinecarboxylic acid, 5,6,7,8-tetrahydro-5-oxo-3-[3-(trifluoromethyl)phenyl]-, ethyl ester (9CI) (CA INDEX NAME)

RN 708983-95-3 HCAPLUS

CN 7-Cinnolinecarboxylic acid, 5,6,7,8-tetrahydro-5-hydroxy-3-[3-(trifluoromethyl)phenyl]-, ethyl ester (9CI) (CA INDEX NAME)

RN 708983-98-6 HCAPLUS

CN 5-Cinnolinol, 5,6,7,8-tetrahydro-7-methyl-3-[3-(trifluoromethyl)phenyl]-, (5R,7R)-rel-(9CI) (CA INDEX NAME)

Relative stereochemistry.

RN 708984-00-3 HCAPLUS

CN 1,2-Pyrrolidinedicarboxylic acid, 1-(1,1-dimethylethyl)
2-[5,6,7,8-tetrahydro-7-methyl-3-[3-(trifluoromethyl)phenyl]-5cinnolinyl] ester, (2S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 708984-07-0 HCAPLUS

CN Benzonitrile, 3-(5,6,7,8-tetrahydro-7-methyl-5-oxo-3-cinnolinyl)-(9CI) (CA INDEX NAME)

RN 708984-20-7 HCAPLUS

CN 5(6H)-Cinnolinone, 3-[2-fluoro-5-(trifluoromethyl)phenyl]-7,8-dihydro-7-methyl-(9CI) (CA INDEX NAME)

RN 708984-23-0 HCAPLUS

CN L-Alanine, N-[(1,1-dimethylethoxy)carbonyl]-, 5,6,7,8-tetrahydro-7-methyl-3-[3-(trifluoromethyl)phenyl]-5-cinnolinyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 708984-25-2 HCAPLUS

CN L-Aspartic acid, N-[(1,1-dimethylethoxy)carbonyl]-,
4-(1,1-dimethylethyl) 1-[5,6,7,8-tetrahydro-7-methyl-3-[3(trifluoromethyl)phenyl]-5-cinnolinyl] ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 708984-27-4 HCAPLUS

CN L-Aspartic acid, N-[(1,1-dimethylethoxy)carbonyl]-,
1-(1,1-dimethylethyl) 4-[5,6,7,8-tetrahydro-7-methyl-3-[3(trifluoromethyl)phenyl]-5-cinnolinyl] ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 708984-31-0 HCAPLUS

CN L-Glutamic acid, N-[(1,1-dimethylethoxy)carbonyl]-,
1-(1,1-dimethylethyl) 5-[5,6,7,8-tetrahydro-7-methyl-3-[3(trifluoromethyl)phenyl]-5-cinnolinyl] ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 708984-33-2 HCAPLUS

CN Glycine, N-[(1,1-dimethylethoxy)carbonyl]-, (5R,7R)-5,6,7,8-tetrahydro-7-methyl-3-[3-(trifluoromethyl)phenyl]-5-cinnolinyl ester, rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

RN 708984-35-4 HCAPLUS

CN L-Leucine, N-[(1,1-dimethylethoxy)carbonyl]-, 5,6,7,8-tetrahydro-7-methyl-3-[3-(trifluoromethyl)phenyl]-5-cinnolinyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 708984-37-6 HCAPLUS

CN L-Lysine, N2,N6-bis[(1,1-dimethylethoxy)carbonyl]-, 5,6,7,8-tetrahydro-7-methyl-3-[3-(trifluoromethyl)phenyl]-5-cinnolinyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 708984-39-8 HCAPLUS

CN L-Methionine, N-[(1,1-dimethylethoxy)carbonyl]-, 5,6,7,8-tetrahydro-7-methyl-3-[3-(trifluoromethyl)phenyl]-5-cinnolinyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 708984-41-2 HCAPLUS

CN L-Phenylalanine, N-[(1,1-dimethylethoxy)carbonyl]-,
5,6,7,8-tetrahydro-7-methyl-3-[3-(trifluoromethyl)phenyl]-5-cinnolinyl
ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 708984-44-5 HCAPLUS

CN L-Valine, N-[(1,1-dimethylethoxy)carbonyl]-, (5S,7S)-5,6,7,8-tetrahydro-7-methyl-3-[3-(trifluoromethyl)phenyl]-5-cinnolinyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 708984-46-7 HCAPLUS

CN D-Phenylalanine, N-[(1,1-dimethylethoxy)carbonyl]-, (5S,7S)-5,6,7,8-tetrahydro-7-methyl-3-[3-(trifluoromethyl)phenyl]-5-cinnolinyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 708984-47-8 HCAPLUS

CN L-Valine, N-[(1,1-dimethylethoxy)carbonyl]-, (5R,7R)-5,6,7,8-tetrahydro-7-methyl-3-[3-(trifluoromethyl)phenyl]-5-cinnolinyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 708984-49-0 HCAPLUS

CN L-Valine, N-[(1,1-dimethylethoxy)carbonyl]-, (5S,7R)-5,6,7,8-tetrahydro-7-methyl-3-[3-(trifluoromethyl)phenyl]-5-cinnolinyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 708984-53-6 HCAPLUS

CN L-Valine, N-[(1,1-dimethylethoxy)carbonyl]-, (5R,7S)-5,6,7,8-tetrahydro-7-methyl-3-[3-(trifluoromethyl)phenyl]-5-cinnolinyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 708984-56-9 HCAPLUS

CN 5(1H)-Cinnolinone, 4,6,7,8-tetrahydro-7-methyl-3-[3-(trifluoromethyl)phenyl]- (9CI) (CA INDEX NAME)

$$\stackrel{\mathsf{Me}}{\overbrace{\hspace{1cm}}}\stackrel{\mathsf{H}}{\overbrace{\hspace{1cm}}}_{\mathsf{CF}_3}$$

RN 708984-57-0 HCAPLUS

CN 5(6H)-Cinnolinone, 7,8-dihydro-7-methyl-3-[3-(trifluoromethyl)phenyl]-(9CI) (CA INDEX NAME)

$$\stackrel{\text{Me}}{\overbrace{\hspace{1cm}}} \stackrel{\text{N}}{\overbrace{\hspace{1cm}}} \stackrel{\text{N}}{\overbrace{$$

RN 708984-61-6 HCAPLUS

CN 5-Cinnolinol, 7-methyl-3-[3-(trifluoromethyl)phenyl]- (9CI) (CA INDEX NAME)

$$\stackrel{\text{Me}}{\overbrace{\hspace{1cm}}}_{\text{OH}}^{\text{N}} \stackrel{\text{N}}{\overbrace{\hspace{1cm}}}_{\text{CF3}}$$

RN 709640-62-0 HCAPLUS

CN 5-Cinnolinol, 5,6,7,8-tetrahydro-7-methyl-3-[3-(trifluoromethyl)phenyl]-, (5S,7S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 709640-63-1 HCAPLUS

CN 5-Cinnolinol, 5,6,7,8-tetrahydro-7-methyl-3-[3-(trifluoromethyl)phenyl]-, (5R,7R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

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708983-92-0P, 7-Phenyl-3-(3-trifluoromethylphenyl)-7,8-dihydro-
IT
     6H-cinnolin-5-one 708983-96-4P, 5-Hydroxy-3-(3-
     trifluoromethylphenyl)-5,6,7,8-tetrahydrocinnoline-7-carboxylic acid
     708983-97-5P 708983-99-7P 708984-01-4P
     708984-02-5P 708984-03-6P 708984-04-7P
     708984-05-8P 708984-06-9P, 7-Hydroxymethyl-3-(3-
     trifluoromethylphenyl)-5,6,7,8-tetrahydrocinnolin-5-ol
     708984-08-1P 708984-09-2P, 7,7-Dimethyl-3-(3-
     trifluoromethylphenyl)-5,6,7,8-tetrahydrocinnolin-5-ol
     708984-10-5P, 3-(3-Trifluoromethylphenyl)-5,6,7,8-
     tetrahydrocinnolin-5-ol 708984-11-6P, 3-(3-Bromophenyl)-7-
     methyl-7,8-dihydro-6H-cinnolin-5-one 708984-12-7P,
     7-Methyl-3-(3-nitrophenyl)-7,8-dihydro-6H-cinnolin-5-one
     708984-13-8P, 7-Methyl-3-(3-tolyl)-7,8-dihydro-6H-cinnolin-5-
     one 708984-14-9P, 3-(3-Methoxycarbonylphenyl)-7-methyl-7,8-
     dihydro-6H-cinnolin-5-one 708984-15-0P, 3-(3-
     Acetylaminophenyl)-7-methyl-7,8-dihydro-6H-cinnolin-5-one
     708984-16-1P, 3-(3-Fluorophenyl)-7-methyl-7,8-dihydro-6H-
     cinnolin-5-one 708984-17-2P, 3-(3-Methoxyphenyl)-7-methyl-
     7,8-dihydro-6H-cinnolin-5-one 708984-18-3P,
     7-Benzyl-3-(3-trifluoromethylphenyl)-7,8-dihydro-6H-pyrido[3,4-
     c]pyridazin-5-one 708984-19-4P 708984-21-8P
     708984-22-9P, 5,7-Dimethyl-3-(3-trifluoromethylphenyl)-5,6,7,8-
     tetrahydrocinnolin-5-ol 708984-24-1P 708984-26-3P
     708984-28-5P 708984-29-6P 708984-30-9P
     708984-32-1P 708984-34-3P 708984-36-5P
     708984-38-7P 708984-40-1P 708984-42-3P
     708984-43-4P 708984-45-6P 708984-48-9P
     708984-51-4P, (5S,7R)-7-Methyl-3-(3-trifluoromethylphenyl)-
     5,6,7,8-tetrahydrocinnolin-5-ol 708984-52-5P
     708984-54-7P, (5R,7S)-7-Methyl-3-(3-trifluoromethylphenyl)-
     5,6,7,8-tetrahydrocinnolin-5-of 708984-55-8P
     708984-59-2P, 3-(3-Trifluoromethylphenyl)-7,8-dihydro-6H-
     cinnolin-5-one 708984-60-5P, 7,7-Dimethyl-3-(3-
     trifluoromethylphenyl)-7,8-dihydro-6H-cinnolin-5-one
     708984-62-7P, 5-Methoxy-7-methyl-3-(3-
     trifluoromethylphenyl)cinnoline 708984-63-8P,
     5-Acetyloxy-7-methyl-3-(3-trifluoromethylphenyl)cinnoline
     708984-64-9P, 5-Benzyloxy-7-methyl-3-(3-
     trifluoromethylphenyl)cinnoline 708984-65-0P
     708984-66-1P 708984-67-2P 708984-68-3P
     708984-69-4P 708984-70-7P
        (preparation of 3-phenylcinnoline homolog as antitumor agents)
     708983-92-0 HCAPLUS
RN
     5(6H)-Cinnolinone, 7,8-dihydro-7-phenyl-3-[3-(trifluoromethyl)phenyl]-
CN
     (9CI)
           (CA INDEX NAME)
```

RN 708983-96-4 HCAPLUS

CN 7-Cinnolinecarboxylic acid, 5,6,7,8-tetrahydro-5-hydroxy-3-[3-(trifluoromethyl)phenyl]- (9CI) (CA INDEX NAME)

RN 708983-97-5 HCAPLUS

CN 7-Cinnolinecarboxylic acid, 5,6,7,8-tetrahydro-5-oxo-3-[3-(trifluoromethyl)phenyl]- (9CI) (CA INDEX NAME)

RN 708983-99-7 HCAPLUS

CN 5-Cinnolinol, 5,6,7,8-tetrahydro-7-methyl-3-[3-(trifluoromethyl)phenyl]-, (5R,7S)-rel-(9CI) (CA INDEX NAME)

Relative stereochemistry.

RN 708984-01-4 HCAPLUS

CN 5-Cinnolinol, 5,6,7,8-tetrahydro-7-methyl-3-[3-(trifluoromethyl)phenyl]-, (5R,7R)-rel-(-)- (9CI) (CA INDEX NAME)

Rotation (-). Absolute stereochemistry unknown.

RN 708984-02-5 HCAPLUS

CN 5-Cinnolinol, 5,6,7,8-tetrahydro-7-methyl-3-[3-(trifluoromethyl)phenyl]-, (5R,7R)-rel-(+)- (9CI) (CA INDEX NAME)

Rotation (+). Absolute stereochemistry unknown.

RN 708984-03-6 HCAPLUS

CN 5-Cinnolinol, 5,6,7,8-tetrahydro-7-methyl-3-[3-(trifluoromethyl)phenyl]-, acetate (ester), (5R,7R)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

RN 708984-04-7 HCAPLUS

CN 5-Cinnolinol, 5,6,7,8-tetrahydro-7-methyl-3-[3-(trifluoromethyl)phenyl]-, 1-oxide, (5R,7R)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

RN 708984-05-8 HCAPLUS

CN 5(6H)-Cinnolinone, 7,8-dihydro-7-methyl-3-[3-(trifluoromethyl)phenyl]-, 1-oxide (9CI) (CA INDEX NAME)

RN 708984-06-9 HCAPLUS

CN 7-Cinnolinemethanol, 5,6,7,8-tetrahydro-5-hydroxy-3-[3-(trifluoromethyl)phenyl]- (9CI) (CA INDEX NAME)

RN 708984-08-1 HCAPLUS

CN Benzonitrile, 3-[(5R,7R)-5,6,7,8-tetrahydro-5-hydroxy-7-methyl-3-cinnolinyl]-, rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

RN 708984-09-2 HCAPLUS

CN 5-Cinnolinol, 5,6,7,8-tetrahydro-7,7-dimethyl-3-[3-(trifluoromethyl)phenyl]- (9CI) (CA INDEX NAME)

RN 708984-10-5 HCAPLUS

CN 5-Cinnolinol, 5,6,7,8-tetrahydro-3-[3-(trifluoromethyl)phenyl]- (9CI) (CA INDEX NAME)

RN 708984-11-6 HCAPLUS

CN 5(6H)-Cinnolinone, 3-(3-bromophenyl)-7,8-dihydro-7-methyl- (9CI) (CA INDEX NAME)

RN 708984-12-7 HCAPLUS

CN 5(6H)-Cinnolinone, 7,8-dihydro-7-methyl-3-(3-nitrophenyl)- (9CI) (CA INDEX NAME)

RN 708984-13-8 HCAPLUS

CN 5(6H)-Cinnolinone, 7,8-dihydro-7-methyl-3-(3-methylphenyl)- (9CI) (CA INDEX NAME)

RN 708984-14-9 HCAPLUS

CN Benzoic acid, 3-(5,6,7,8-tetrahydro-7-methyl-5-oxo-3-cinnolinyl)-, methyl ester (9CI) (CA INDEX NAME)

RN 708984-15-0 HCAPLUS

CN Acetamide, N-[3-(5,6,7,8-tetrahydro-7-methyl-5-oxo-3-cinnolinyl)phenyl]- (9CI) (CA INDEX NAME)

RN 708984-16-1 HCAPLUS

CN 5(6H)-Cinnolinone, 3-(3-fluorophenyl)-7,8-dihydro-7-methyl- (9CI) (CA INDEX NAME)

RN 708984-17-2 HCAPLUS

CN 5(6H)-Cinnolinone, 7,8-dihydro-3-(3-methoxyphenyl)-7-methyl- (9CI) (CA INDEX NAME)

RN 708984-18-3 HCAPLUS

CN Pyrido[3,4-c]pyridazin-5(6H)-one, 7,8-dihydro-7-(phenylmethyl)-3-[3-(trifluoromethyl)phenyl]- (9CI) (CA INDEX NAME)

RN 708984-19-4 HCAPLUS

CN 7-Cinnolinemethanol, 5,6,7,8-tetrahydro-5-hydroxy- α , α -dimethyl-3-[3-(trifluoromethyl)phenyl]- (9CI) (CA INDEX NAME)

RN 708984-21-8 HCAPLUS

CN 5-Cinnolinol, 3-[2-fluoro-5-(trifluoromethyl)phenyl]-5,6,7,8-tetrahydro-7-methyl- (9CI) (CA INDEX NAME)

RN. 708984-22-9 HCAPLUS

CN 5-Cinnolinol, 5,6,7,8-tetrahydro-5,7-dimethyl-3-[3-(trifluoromethyl)phenyl]- (9CI) (CA INDEX NAME)

RN 708984-24-1 HCAPLUS

CN L-Alanine, 5,6,7,8-tetrahydro-7-methyl-3-[3-(trifluoromethyl)phenyl]-5-cinnolinyl ester, dihydrochloride (9CI) (CA INDEX NAME)

Absolute stereochemistry.

●2 HCl

RN 708984-26-3 HCAPLUS
CN L-Aspartic acid, 1-[5,6,7,8-tetrahydro-7-methyl-3-[3(trifluoromethyl)phenyl]-5-cinnolinyl] ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Absolute stereochemistry.

●2 HCl

RN 708984-29-6 HCAPLUS
CN L-Glutamic acid, N-[(1,1-dimethylethoxy)carbonyl]-,
5-(1,1-dimethylethyl) 1-[5,6,7,8-tetrahydro-7-methyl-3-[3-(trifluoromethyl)phenyl]-5-cinnolinyl] ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 708984-30-9 HCAPLUS

CN L-Glutamic acid, 1-[5,6,7,8-tetrahydro-7-methyl-3-[3-(trifluoromethyl)phenyl]-5-cinnolinyl] ester, dihydrochloride (9CI) (CA INDEX NAME)

Absolute stereochemistry.

2 HCl

RN 708984-32-1 HCAPLUS

CN L-Glutamic acid, 5-[5,6,7,8-tetrahydro-7-methyl-3-[3-(trifluoromethyl)phenyl]-5-cinnolinyl] ester, dihydrochloride (9CI) (CA INDEX NAME)

Absolute stereochemistry:

RN 708984-34-3 HCAPLUS

CN Glycine, (5R,7R)-5,6,7,8-tetrahydro-7-methyl-3-[3-(trifluoromethyl)phenyl]-5-cinnolinyl ester, dihydrochloride, rel-

Relative stereochemistry.

●2 HCl

RN 708984-36-5 HCAPLUS

CN L-Leucine, 5,6,7,8-tetrahydro-7-methyl-3-[3-(trifluoromethyl)phenyl]-5-cinnolinyl ester, dihydrochloride (9CI) (CA INDEX NAME)

Absolute stereochemistry.

●2 HCl

RN 708984-38-7 HCAPLUS

CN L-Lysine, 5,6,7,8-tetrahydro-7-methyl-3-[3-(trifluoromethyl)phenyl]-5-cinnolinyl ester, trihydrochloride (9CI) (CA INDEX NAME)

Absolute stereochemistry.

●3 HCl

RN 708984-40-1 HCAPLUS

CN L-Methionine, 5,6,7,8-tetrahydro-7-methyl-3-[3-(trifluoromethyl)phenyl]-5-cinnolinyl ester, dihydrochloride (9CI) (CA INDEX NAME)

Absolute stereochemistry.

●2 HCl

RN 708984-42-3 HCAPLUS

CN L-Phenylalanine, 5,6,7,8-tetrahydro-7-methyl-3-[3-(trifluoromethyl)phenyl]-5-cinnolinyl ester, dihydrochloride (9CI) (CA INDEX NAME)

Absolute stereochemistry.

$$\begin{array}{c|c} \text{Me} & \text{N} & \text{N} \\ \text{NH}_2 & \text{CF}_3 \\ \text{Ph} & \text{S} & \text{O} \end{array}$$

●2 HCl

RN 708984-43-4 HCAPLUS

CN L-Proline, 5,6,7,8-tetrahydro-7-methyl-3-[3-(trifluoromethyl)phenyl]-5-cinnolinyl ester, dihydrochloride (9CI) (CA INDEX NAME)

Absolute stereochemistry.

●2 HCl

Absolute stereochemistry. Rotation (+).

●2 HCl

Absolute stereochemistry. Rotation (-).

●2 HCl

RN 708984-51-4 HCAPLUS CN 5-Cinnolinol, 5,6,7,8-tetrahydro-7-methyl-3-[3(trifluoromethyl)phenyl]-, (5S,7R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 708984-52-5 HCAPLUS

CN L-Valine, (5S,7R)-5,6,7,8-tetrahydro-7-methyl-3-[3-(trifluoromethyl)phenyl]-5-cinnolinyl ester, dihydrochloride (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

●2 HCl

RN 708984-54-7 HCAPLUS

CN 5-Cinnolinol, 5,6,7,8-tetrahydro-7-methyl-3-[3-(trifluoromethyl)phenyl]-, (5R,7S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 708984-55-8 HCAPLUS

CN L-Valine, (5R,7S)-5,6,7,8-tetrahydro-7-methyl-3-[3-(trifluoromethyl)phenyl]-5-cinnolinyl ester, dihydrochloride (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

●2 HCl

RN 708984-59-2 HCAPLUS

CN 5(6H)-Cinnolinone, 7,8-dihydro-3-[3-(trifluoromethyl)phenyl]- (9CI) (CA INDEX NAME)

RN 708984-60-5 HCAPLUS

CN 5(6H)-Cinnolinone, 7,8-dihydro-7,7-dimethyl-3-[3-(trifluoromethyl)phenyl]- (9CI) (CA INDEX NAME)

RN 708984-62-7 HCAPLUS

CN Cinnoline, 5-methoxy-7-methyl-3-[3-(trifluoromethyl)phenyl]- (9CI) (CA INDEX NAME)

RN 708984-63-8 HCAPLUS

CN

5-Cinnolinol, 7-methyl-3-[3-(trifluoromethyl)phenyl]-, acetate (ester)

RN 708984-64-9 HCAPLUS

CN Cinnoline, 7-methyl-5-(phenylmethoxy)-3-[3-(trifluoromethyl)phenyl](9CI) (CA INDEX NAME)

RN 708984-65-0 HCAPLUS

CN 5-Cinnolinol, 5,6,7,8-tetrahydro-7-methyl-3-[3-(trifluoromethyl)phenyl]- (9CI) (CA INDEX NAME)

RN 708984-66-1 HCAPLUS

CN 5-Cinnolinol, 5,6,7,8-tetrahydro-7-methyl-3-[3-(trifluoromethyl)phenyl]-, 1-oxide (9CI) (CA INDEX NAME)

RN 708984-67-2 HCAPLUS

CN Glycine, 5,6,7,8-tetrahydro-7-methyl-3-[3-(trifluoromethyl)phenyl]-5-cinnolinyl ester (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} \text{Me} & \text{N} & \text{N} \\ \text{H2N-CH2-C-O} & \text{CF3} \end{array}$$

RN 708984-68-3 HCAPLUS

CN L-Alanine, 5,6,7,8-tetrahydro-7-methyl-3-[3-(trifluoromethyl)phenyl]-5-cinnolinyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 708984-69-4 HCAPLUS

CN L-Valine, 5,6,7,8-tetrahydro-7-methyl-3-[3-(trifluoromethyl)phenyl]-5-cinnolinyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 708984-70-7 HCAPLUS

CN L-Glutamic acid, 1-[5,6,7,8-tetrahydro-7-methyl-3-[3-(trifluoromethyl)phenyl]-5-cinnolinyl] ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

ICM C07D237-28

IC

ICS C07D471-04; A61K031-502; A61K031-5025; A61P035-00 28-15 (Heterocyclic Compounds (More Than One Hetero Atom)) CC Section cross-reference(s): 1 708983-93-1P 708983-95-3P, 5-Hydroxy-3-(3-ΙT trifluoromethylphenyl)-5,6,7,8-tetrahydrocinnoline-7-carboxylic acid ethyl ester 708983-98-6P 708984-00-3P 708984-07-0P, 3-(3-Cyanophenyl)-7-methyl-7,8-dihydro-6Hcinnolin-5-one 708984-20-7P 708984-23-0P 708984-25-2P 708984-27-4P 708984-31-0P 708984-33-2P 708984-35-4P 708984-37-6P 708984-39-8P 708984-41-2P 708984-44-5P 708984-46-7P 708984-47-8P 708984-49-0P 708984-53-6P 708984-56-9P, 7-Methyl-3-(3trifluoromethylphenyl)-4,6,7,8-tetrahydro-1H-cinnolin-5-one 708984-57-0P, 7-Methyl-3-(3-trifluoromethylphenyl)-7,8-dihydro-6H-cinnolin-5-one **708984-61-6P**, 7-Methyl-3-(3trifluoromethylphenyl)cinnolin-5-ol 709640-62-0P 709640-63-1P (preparation of 3-phenylcinnoline homolog as antitumor agents) 708983-92-0P, 7-Phenyl-3-(3-trifluoromethylphenyl)-7,8-dihydro-ΙT 6H-cinnolin-5-one 708983-96-4P, 5-Hydroxy-3-(3trifluoromethylphenyl)-5,6,7,8-tetrahydrocinnoline-7-carboxylic acid 708983-97-5P 708983-99-7P 708984-01-4P 708984-02-5P 708984-03-6P 708984-04-7P 708984-05-8P 708984-06-9P, 7-Hydroxymethyl-3-(3trifluoromethylphenyl)-5,6,7,8-tetrahydrocinnolin-5-ol 708984-08-1P 708984-09-2P, 7,7-Dimethyl-3-(3trifluoromethylphenyl)-5,6,7,8-tetrahydrocinnolin-5-ol 708984-10-5P, 3-(3-Trifluoromethylphenyl)-5,6,7,8tetrahydrocinnolin-5-ol 708984-11-6P, 3-(3-Bromophenyl)-7-

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7-Methyl-3-(3-nitrophenyl)-7,8-dihydro-6H-cinnolin-5-one
    708984-13-8P, 7-Methyl-3-(3-tolyl)-7,8-dihydro-6H-cinnolin-5-
    one 708984-14-9P, 3-(3-Methoxycarbonylphenyl)-7-methyl-7,8-
    dihydro-6H-cinnolin-5-one 708984-15-0P, 3-(3-
    Acetylaminophenyl)-7-methyl-7,8-dihydro-6H-cinnolin-5-one
    708984-16-1P, 3-(3-Fluorophenyl)-7-methyl-7,8-dihydro-6H-
    cinnolin-5-one 708984-17-2P, 3-(3-Methoxyphenyl)-7-methyl-
    7,8-dihydro-6H-cinnolin-5-one 708984-18-3P,
    7-Benzyl-3-(3-trifluoromethylphenyl)-7,8-dihydro-6H-pyrido[3,4-
    c]pyridazin-5-one 708984-19-4P 708984-21-8P
    708984-22-9P, 5,7-Dimethyl-3-(3-trifluoromethylphenyl)-5,6,7,8-
    tetrahydrocinnolin-5-ol 708984-24-1P 708984-26-3P
    708984-28-5P 708984-29-6P 708984-30-9P
    708984-32-1P 708984-34-3P 708984-36-5P
    708984-38-7P 708984-40-1P 708984-42-3P
    708984-43-4P 708984-45-6P 708984-48-9P
    708984-51-4P, (5S,7R)-7-Methyl-3-(3-trifluoromethylphenyl)-
    5,6,7,8-tetrahydrocinnolin-5-ol 708984-52-5P
    708984-54-7P, (5R,7S)-7-Methyl-3-(3-trifluoromethylphenyl)-
     5,6,7,8-tetrahydrocinnolin-5-ol 708984-55-8P
                                                   708984-58-1P
    708984-59-2P, 3-(3-Trifluoromethylphenyl)-7,8-dihydro-6H-
    cinnolin-5-one 708984-60-5P, 7,7-Dimethyl-3-(3-
     trifluoromethylphenyl) -7,8-dihydro-6H-cinnolin-5-one
     708984-62-7P, 5-Methoxy-7-methyl-3-(3-
     trifluoromethylphenyl)cinnoline.708984-63-8P,
     5-Acetyloxy-7-methyl-3-(3-trifluoromethylphenyl)cinnoline
     708984-64-9P, 5-Benzyloxy-7-methyl-3-(3-
     trifluoromethylphenyl)cinnoline 708984-65-0P
     708984-66-1P 708984-67-2P 708984-68-3P
     708984-69-4P 708984-70-7P
        (preparation of 3-phenylcinnoline homolog as antitumor agents)
     2003-10-3P, 2-Bromo-3'-trifluoromethylacetophenone
                                                          4142-98-7P
ΙŤ
     15057-43-9P, 1-Benzyl-5-hydroxy-1,6-dihydro-2H-pyridin-3-one
     66310-85-8P, N-Methyl-N-(2-oxopropyl)glycine ethyl ester
     82074-39-3P, 5-Hydroxy-1-methyl-1,6-dihydro-2H-pyridin-3-one
                   708984-71-8P 708984-72-9P,
     88805-65-6P
     7-Phenyl-3-(3-trifluoromethylphenyl)-4,6,7,8-tetrahydro-1H-cinnolin-5-
           708984-73-0P
        (preparation of 3-phenylcinnoline homolog as antitumor agents)
L60 ANSWER 3 OF 16 HCAPLUS COPYRIGHT 2006 ACS on STN
                         2003:821629 HCAPLUS Full-text
ACCESSION NUMBER:
                         140:93765
DOCUMENT NUMBER:
                         New insight into the azaenamine behaviour of
TITLE:
                         N-arylhydrazones: First aldol and improved Mannich
                         reactions with unactivated aldehydes
                         El Kaim, Laurent; Gautier, Laurent; Grimaud,
AUTHOR(S):
                         Laurence; Michaut, Valerie
                         Laboratoire Chimie et Procedes, Ecole Nationale
CORPORATE SOURCE:
                         Superieure de Techniques Avancees, Paris, 75015,
                         Fr.
                         Synlett (2003), (12), 1844-1846
SOURCE:
                         CODEN: SYNLES; ISSN: 0936-5214
                         Georg Thieme Verlag
PUBLISHER:
DOCUMENT TYPE:
                         Journal
LANGUAGE:
                         English
                         CASREACT 140:93765
OTHER SOURCE(S):
     N-Arylhydrazones can be added to various aldehydes in amine solvents to form
     new Mannich and aldol products. A wide range of hydrazones and aldehydes
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methyl-7,8-dihydro-6H-cinnolin-5-one 708984-12-7P,

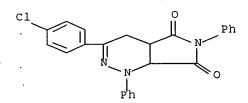
formally reported as unreactive can now be coupled to give adducts easily converted into azoalkenes. These transformations parallel the aldolization/crotonization processes allowing access to novel heterocycles and the design of new multi-component reactions.

IT 642486-70-2P

> (application of aldol/Mannich reactions of aryl-substituted hydrazones with unactivated aldehydes to preparation of bicyclic imide via four-component aldolization/crotonization/Michael addition processes)

642486-70-2 HCAPLUS RN

1H-Pyrrolo[3,4-c]pyridazine-5,7(4H,6H)-dione, 3-(4-chlorophenyl)-4a,7a-CNdihydro-1,6-diphenyl- (9CI) (CA INDEX NAME)



25-22 (Benzene, Its Derivatives, and Condensed Benzenoid Compounds) CC Section cross-reference(s): 28

642486-70-2P IT

> (application of aldol/Mannich reactions of aryl-substituted hydrazones with unactivated aldehydes to preparation of bicyclic imide via four-component aldolization/crotonization/Michael addition processes)

REFERENCE COUNT:

THERE ARE 22 CITED REFERENCES AVAILABLE FOR 22 THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L60 ANSWER 4 OF 16 HCAPLUS COPYRIGHT 2006 ACS on STN 2002:307948 HCAPLUS Full-text ACCESSION NUMBER:

DOCUMENT NUMBER:

139:149590

TITLE:

New heterocyclic precursors for thermal generation

of reactive, electron-rich 1,2-diaza-1,3butadienes [Erratum to document cited in

CA136:53719]

AUTHOR(S):

Boeckman, Robert K., Jr.; Ge, Ping; Reed, Jessica

CORPORATE SOURCE:

Department of Chemistry, University of Rochester,

Rochester, NY, 14627-0216, USA

SOURCE:

Organic Letters (2002), 4(9), 1635

CODEN: ORLEF7; ISSN: 1523-7060

PUBLISHER:

American Chemical Society

DOCUMENT TYPE:

Journal

English LANGUAGE:

The structure of unlabeled and labeled compound 6 is incorrect in the Table of AΒ Contents graphic, the Abstract graphic, the graphics above Tables 1 and 2, and Scheme 3; the corrected structure is given. The corrected structure is also given for the unlabeled structure above the second arrow in the Table of Contents graphic, the abstract graphic, and Scheme 3. On page 3647, Abstract, line 2, N-phenyldiazamaleimide should read N-phenylmaleimide. On page 3648, column 2, Table 1, the legend for the sixth substrate which reads R2 = OPhNO2o should read R2 = OPhNO2p. On page 3649, column 1, paragraph 4, sentence 2, N-

phenylmaleiimide should read N-phenylmaleimide. On page 3649, Table 2, column 1, the legend under structure 6 and the heading of the third column should read 6a,f,g. On page 3650, column 2, compound nos. in the Supporting Information Available statement should read 21, 2f, 3b, 4a, 4f, 6a, 6d, 6e, 6f, 8, 10, and 11. The Supporting Information has been revised to correct the compound numbering. This material is available free of charge via the Internet at http://pubs.acs.organic

IT 381730-42-3P 381730-43-4P 381730-44-5P 381730-45-6P 381730-46-7P 381730-65-0P

(preparation and thermolysis of stable heterocyclic precursors of 1,2-diaza-1,3-butadienes (Erratum))

RN 381730-42-3 HCAPLUS

CN 1H-Pyrrolo[3,4-c]pyridazine-5,7(4H,6H)-dione, 4a,7a-dihydro-1,3,4,6-tetraphenyl-, (4R,4aR,7aS)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

RN 381730-43-4 HCAPLUS

CN 1H-Pyrrolo[3,4-c]pyridazine-5,7(4H,6H)-dione, 4a,7a-dihydro-4-phenoxy-1,3,6-triphenyl-, (4R,4aR,7aR)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

RN 381730-44-5 HCAPLUS

CN 1H-Pyrrolo[3,4-c]pyridazine-5,7(4H,6H)-dione, 4a,7a-dihydro-4-(2-methylphenoxy)-1,3,6-triphenyl-, (4R,4aR,7aR)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

RN 381730-45-6 HCAPLUS

CN 1H-Pyrrolo[3,4-c]pyridazine-5,7(4H,6H)-dione, 4a,7a-dihydro-4-(4-methylphenoxy)-1,3,6-triphenyl-, (4R,4aR,7aR)-rel- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 381730-46-7 HCAPLUS

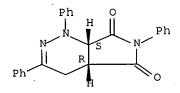
CN 1H-Pyrrolo[3,4-c]pyridazine-5,7(4H,6H)-dione, 4a,7a-dihydro-4-(2-nitrophenoxy)-1,3,6-triphenyl-, (4R,4aR,7aR)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

RN 381730-65-0 HCAPLUS

CN 1H-Pyrrolo[3,4-c]pyridazine-5,7(4H,6H)-dione, 4a,7a-dihydro-1,3,6-triphenyl-, (4aR,7aS)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.



28-15 (Heterocyclic Compounds (More Than One Hetero Atom)) CC

381730-41-2P 381730-37-6P 381730-39-8P 381730-40-1P ТТ

381730-42-3P 381730-43-4P 381730-44-5P

381730-52-5P 381730-45-6P 381730-46-7P

381730-53-6P 381730-54-7P 381730-55-8P 381730-63-8P

381730-66-1P 381730-65-0P

(preparation and thermolysis of stable heterocyclic precursors of 1,2-diaza-1,3-butadienes (Erratum))

L60 ANSWER 5 OF 16 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER:

2001:758215 HCAPLUS Full-text 136:53719

DOCUMENT NUMBER: TITLE:

New Heterocyclic Precursors for Thermal Generation

of Reactive, Electron-Rich 1,2-Diaza-1,3-

butadienes

AUTHOR (S):

Boeckman, Robert K., Jr.; Ge, Ping; Reed, Jessica

CORPORATE SOURCE:

Department of Chemistry, University of Rochester,

Rochester, NY, 14627-0216, USA

SOURCE:

Organic Letters (2001), 3(23), 3647-3650

CODEN: ORLEF7; ISSN: 1523-7060

PUBLISHER:

American Chemical Society

DOCUMENT TYPE:

Journal

LANGUAGE:

English

OTHER SOURCE(S):

CASREACT 136:53719

The preparation and thermolysis of new stable heterocyclic precursors of 1,2diaza-1,3-butadienes is described. The resulting reactive diazadienes are trapped in situ with N-phenylmaleimide. The effect of precursor structure on the temperature at which the diazadienes are generated is discussed.

381730-42-3P 381730-43-4P 381730-44-5P IT 381730-45-6P 381730-46-7P 381730-65-0P

(preparation and thermolysis of stable heterocyclic precursors of 1,2-diaza-1,3-butadienes)

381730-42-3 HCAPLUS RN

1H-Pyrrolo[3,4-c]pyridazine-5,7(4H,6H)-dione, 4a,7a-dihydro-1,3,4,6-CN tetraphenyl-, (4R,4aR,7aS)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

RN 381730-43-4 HCAPLUS

CN 1H-Pyrrolo[3,4-c]pyridazine-5,7(4H,6H)-dione, 4a,7a-dihydro-4-phenoxy-1,3,6-triphenyl-, (4R,4aR,7aR)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

RN 381730-44-5 HCAPLUS

CN 1H-Pyrrolo[3,4-c]pyridazine-5,7(4H,6H)-dione, 4a,7a-dihydro-4-(2-methylphenoxy)-1,3,6-triphenyl-, (4R,4aR,7aR)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

RN 381730-45-6 HCAPLUS

CN 1H-Pyrrolo[3,4-c]pyridazine-5,7(4H,6H)-dione, 4a,7a-dihydro-4-(4-methylphenoxy)-1,3,6-triphenyl-, (4R,4aR,7aR)-rel- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 381730-46-7 HCAPLUS

CN 1H-Pyrrolo[3,4-c]pyridazine-5,7(4H,6H)-dione, 4a,7a-dihydro-4-(2-nitrophenoxy)-1,3,6-triphenyl-, (4R,4aR,7aR)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

RN 381730-65-0 HCAPLUS

CN 1H-Pyrrolo[3,4-c]pyridazine-5,7(4H,6H)-dione, 4a,7a-dihydro-1,3,6-triphenyl-, (4aR,7aS)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

CC 28-15 (Heterocyclic Compounds (More Than One Hetero Atom))

IT 381730-37-6P 381730-39-8P 381730-40-1P 381730-41-2P

381730-42-3P 381730-43-4P 381730-44-5P

381730-45-6P 381730-46-7P 381730-52-5P

381730-53-6P 381730-54-7P 381730-55-8P 381730-63-8P

381730-65-0P 381730-66-1P

(preparation and thermolysis of stable heterocyclic precursors of 1,2-diaza-1,3-butadienes)

REFERENCE COUNT:

31 THERE ARE 31 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE

RE FORMAT

L60 ANSWER 6 OF 16 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER:

2001:557320 HCAPLUS Full-text

DOCUMENT NUMBER:

135:288678

TITLE:

The synthesis of 3-acetyl-2-(4,4-dimethyl-2,6-dioxocyclohexyl)-1-phenylpentanedione-1,4 and its

reactions with N-nucleophiles

AUTHOR(S):

Andin, Alexander N.; Kaminskii, Vladimir A.;

Dubovitskii, Sergey V.

CORPORATE SOURCE:

Far Eastern State University, Vladivostok, 690950,

Russia

Heterocyclic Communications (2001), 7(2), 155-158 SOURCE:

> CODEN: HCOMEX; ISSN: 0793-0283 Freund Publishing House Ltd.

PUBLISHER: DOCUMENT TYPE:

Journal

LANGUAGE:

English

OTHER SOURCE(S):

CASREACT 135:288678

The condensation of 3-hydroxy-5,5-dimethyl-2-cyclohexen-1-one with 1,1diacetyl-2-benzoylethylene gave 2-[1-benzoyl-2-(1- hydroxyethylidene)-3oxobutyl]-1,3-cyclohexanedione (I). The reaction of I with primary amines give pyrroles; reaction with ammonium acetate gave a pyrrolo[3,4-c]quinoline derivative The reaction of 3-amino-5,5-dimethyl-2-cyclohexen-1-one with 1,1diacetyl-2- benzoylethylene was also reported.

364729-38-4P IT

(preparation of)

364729-38-4 HCAPLUS RN

2,4-Pentanedione, 3-(1,4,5,6,7,8-hexahydro-7,7-dimethyl-5-oxo-3-phenyl-CN 4-cinnolinyl) - (9CI) (CA INDEX NAME)

27-17 (Heterocyclic Compounds (One Hetero Atom))

Section cross-reference(s): 24

364729-39-5P 364729-37-3P 364729-38-4P IT364729-36-2P

364729-40-8P

(preparation of)

REFERENCE COUNT:

THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE

RE FORMAT

HCAPLUS COPYRIGHT 2006 ACS on STN L60 ANSWER 7 OF 16

ACCESSION NUMBER:

1998:572928 HCAPLUS Full-text

DOCUMENT NUMBER:

129:275887

TITLE:

Inhibition of monoamine oxidase-B by condensed

pyridazines and pyrimidines: Effects of

lipophilicity and structure-activity relationships

AUTHOR(S):

Altomare, Cosimo; Cellamare, Saverio; Summo, Luciana; Catto, Marco; Carotti, Angelo; Thull, Ulrike; Carrupt, Pierre-Alain; Testa, Bernard;

Stoeckli-Evans, Helen

CORPORATE SOURCE:

Dipartimento Farmaco-chimico, Universita di Bari,

Bari, I-70125, Italy

SOURCE:

Journal of Medicinal Chemistry (1998), 41(20),

3812-3820

CODEN: JMCMAR; ISSN: 0022-2623

PUBLISHER:

DOCUMENT TYPE:

American Chemical Society

LANGUAGE:

Journal English

GI

$$\begin{array}{c|c}
N = N \\
R4
\end{array}$$
I

An number of condensed pyridazines, e.g., I (R3 = H, Ph, 4'-FC6H4, etc.), and pyrimidines, e.g., II, were synthesized and tested for their monoamine oxidase-A (MAO-A) and MAO-B inhibitory activity. Their lipophilicity was examined by measuring partition coeffs. and RP-HPLC capacity factors, revealing some peculiar electronic and conformational effects. Further insights were obtained by x-ray crystallog, and a thermodn. study of RP-HPLC retention. Structure-activity relations highlighted the main factors determining both selectivity and inhibitory potency. Thus, while most of the condensed pyridazines were reversible inhibitors of MAO-B with little or no MAO-A effects, the pyrimidine derivs. proved to be reversible and selective MAO-A inhibitors. Substituents on the diazine nucleus modulated enzyme inhibition. A QSAR anal. of X-substituted 3-X-phenyl-5H-indeno[1,2-c]pyridazin-5-ones showed lipophilicity to increase MAO-B and not MAO-A inhibitory activity.

IT 213837-33-3P

(preparation, monoamine oxidase-A and -B inhibitory activity, and structure activity relationship of condensed pyridazines)

RN 213837-33-3 HCAPLUS

CN 5 (6H)-Cinnolinone, 7,8-dihydro-3-phenyl- (9CI) (CA INDEX NAME)

CC 28-16 (Heterocyclic Compounds (More Than One Hetero Atom))

Section cross-reference(s): 7

IT 34595-83-0P 150365-52-9P 213837-33-3P 213837-34-4P

213837-36-6P 213837-38-8P

(preparation, monoamine oxidase-A and -B inhibitory activity, and structure activity relationship of condensed pyridazines)

REFERENCE COUNT:

THERE ARE 56 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L60 ANSWER 8 OF 16 HCAPLUS COPYRIGHT 2006 ACS ON STN ACCESSION NUMBER: 1998:268348 HCAPLUS Full-text

DOCUMENT NUMBER:

128:321662

TITLE:

Compositions and methods for treating bone deficit

conditions

INVENTOR(S):

Orme, Mark W.; Baindur, Nand; Robbins, Kirk G.; et

al.

PATENT ASSIGNEE(S):

Zymogenetics, Inc., USA; Osteoscreen, Inc.

SOURCE:

PCT Int. Appl., 215 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

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PATENT NO.								APPLICATION NO.									
								WO 1997-US18864									
											, EE,					, IS,	
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		PL.	RO.	SG.	SI,	SK	TR.	TT,	UA,	US	; US,	US,	US,	US,	US	, US,	,
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	5919				A						1997-					19970	0228
	5922				A						1997-					1997(0228
	5948				A						1997-			•		19970	0228
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			IE,					•	•								
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	6649				В1			1118	1	US	1999-	2971	88				
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										US	1996-	7362	28		A2	1996	1023
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										TAT C	1997	11010	961		W	1997	1023
		•								WU	1997-	0010	004		**	± , , , ,	

Compds. containing 2 covalently linked aromatic systems, i.e. ArlLAr2 [I; Arl, AB Ar2 = (un)substituted Ph, naphthyl, or 5- or 6-membered aromatic heterocyclyl; L = linker (atoms or covalent bond per se) so as to space the aromatic systems at a distance of 1.5-15 Å] are effective in treating conditions associated with bone deficits. The compds. can be administered to vertebrate subjects alone or in combination with addnl. agents that promote bone growth or that inhibit bone resorption. They can be screened for activity prior to administration by assessing their ability to effect the transcription of a reporter gene coupled to a promoter associated with a bone morphogenetic protein and/or their ability to stimulate calvarial growth in model animal systems. A variety of compds. were prepared and/or tested by high-throughput screening. For instance, title compound II was prepared by condensation of 2chloro-5-(trifluoromethyl)pyridine with ethylenediamine in the presence of EtN(Pr-iso)2 at reflux. At 5-50 $\mu g/kg/day$ in ovariectomized rats, II stimulated bone growth with volume increases of 21-71% observed In a calvarial bone growth assay, another compound I induced a 4-fold increase in width of new calvarial bone vs. controls.

IT 190436-31-8 190436-38-5

(preparation of (hetero)aromatic compds. for treating bone deficit conditions)

RN 190436-31-8 HCAPLUS

CN 5(1H)-Cinnolinone, 3-(4-chloro-3-methylphenyl)-4,6,7,8-tetrahydro-7,7-dimethyl- (9CI) (CA INDEX NAME)

RN 190436-38-5 HCAPLUS

CN 5(1H)-Cinnolinone, 3-(4-bromophenyl)-4,6,7,8-tetrahydro-7,7-dimethyl-(9CI) (CA INDEX NAME)

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IC
     ICM A61K031-165
          A61K031-215; A61K031-33; A61K031-405; A61K031-415; A61K031-42;
          A61K031-425; A61K031-44; A61K031-47; A61K031-505; A61K031-53;
          A61K031-535; A61K031-54
CC
     28-20 (Heterocyclic Compounds (More Than One Hetero Atom))
     Section cross-reference(s): 1, 25, 27
                                                   1694-45-7
IT
     479-13-0
                619-67-0
                           961-60-4
                                       1138-15-4
                                                               2390-54-7
     4765-56-4
                 6019-43-8
                             7477-43-2 7477-46-5 10205-62-6
                  15826-37-6
                                19736-41-5
     10360-31-3
                                             22765-52-2
                                                          22765-57-7
                  33357-46-9
                                33757-75-4
                                             34580-14-8
                                                          37052-98-5
     28620-82-8
                                             49582-19-6
     38101-69-8
                  38101-92-7
                                48189-64-6
                                                          52869-16-6
                                                          77038-70-1
     53846-93-8
                  57601-14-6
                                62225-55-2
                                             73548-13-7
                                             84088-42-6
                                                          93873-08-6
                                80998-91-0
     77143-59-0
                  77669-19-3
                                                116249-87-7
                                                              129855-33-0
     108608-01-1
                   110490-58-9
                                  112535-18-9
                                                139233-22-0
                                                              143816-39-1
     131136-84-0
                   133124-80-8
                                  133928-85-5
     145603-02-7
                   182572-98-1
                                  190436-20-5
                                                190436-27-2
     190436-31-8
                   190436-32-9
                                  190436-35-2 190436-38-5
                   190436-44-3
                                  190436-47-6
                                                190436-51-2
                                                              190436-55-6
     190436-40-9
                                  190436-67-0
                                                190436-71-6
                                                              190436-74-9
     190436-58-9
                   190436-62-5
                                                190436-87-4
                                                              190436-90-9
     190436-78-3
                   190436-79-4
                                  190436-83-0
                                                190437-12-8
                                                              190437-16-2
     190436-93-2
                   190436-96-5
                                  190437-08-2
                                                190437-29-7
                                                              190437-36-6
     190437-20-8
                   190437-23-1
                                  190437-26-4
                                                190437-41-3
                                                              190437-42-4
     190437-38-8
                   190437-39-9
                                  190437-40-2
                                                190437-46-8
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                   190437-44-6
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                                                190437-51-5
                                                              190437-52-6
                   190437-49-1
                                  190437-50-4
     190437-48-0
                                                190437-56-0
                                                              190437-57-1
     190437-53-7
                   190437-54-8
                                  190437-55-9
                                                190437-62-8
                                                              190437-63-9
     190437-59-3
                   190437-60-6
                                  190437-61-7
                                                190437-67-3
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     190437-69-5
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                                  190437-76-4
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                   190437-75-3
                                                190437-83-3
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     190437-79-7
                   190437-80-0
                                                              190437-89-9
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     190437-85-5
                   190437-86-6
                                  190437-87-7
                                  190437-93-5
                                                190437-94-6
                                                               190437-95-7
     190437-91-3
                   190437-92-4
                                                190438-00-7
                   190437-98-0
                                  190437-99-1
     190437-96-8
        (preparation of (hetero) aromatic compds. for treating bone deficit
        conditions)
                                THERE ARE 12 CITED REFERENCES AVAILABLE FOR
                          12
REFERENCE COUNT:
                                THIS RECORD. ALL CITATIONS AVAILABLE IN THE
                                RE FORMAT
                     HCAPLUS COPYRIGHT 2006 ACS on STN
    ANSWER 9 OF 16
                          1997:397336 HCAPLUS Full-text
ACCESSION NUMBER:
DOCUMENT NUMBER:
                          127:17703
                          Preparation of (hetero)aromatic compounds for
TITLE:
                          treating bone deficit conditions.
                          Petrie, Charles; Orme, Mark W.; Baindur, Nand;
INVENTOR(S):
                          Robbins, Kirk G.; Harris, Scott M.; Kontoyianni,
                          Maria; Hurley, Laurence H.; Kerwin, Sean M.;
                          Mundy, Gregory R.
                          Zymogenetics, Inc., USA; Osteoscreen, Inc.;
PATENT ASSIGNEE(S):
                          University of Texas At Austin
                          PCT Int. Appl., 99 pp.
SOURCE:
                          CODEN: PIXXD2
DOCUMENT TYPE:
                          Patent
LANGUAGE:
                          English
FAMILY ACC. NUM. COUNT:
PATENT INFORMATION:
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PA	PATENT NO.						KIND DATE				LICAT	DATE					
									WO 1996-US17019								
	W:	AL,	AM,	AU,	BA,	BB,	BG,	BR,	CA,	CN	, CU,	CZ,	EE,	FI,	GE,	HÜ,	
		IL,	IS,	JP,	KG,	ΚP,	KR,	LC,	LK,	LR	, LT,	LV,	MD,	MG,	MK,	MN,	
		MX,	NO,	NZ,	PL,	RO,	SG,	SI,	SK,	TR	, TT,	UA,	UZ,	VN,	ΑZ,	BY,	
		KZ,	RU,	TJ,	TM				•								
	RW:	KE,	LS,	MW,	SD,	SZ,	ŪĠ,	ΑT,	BE,	СН	, DE,	DK,	ES,	FI,	FR,	GB,	
																GA,	
		GN,	ML,	MR,	NE,	SN,	TD,	· TG									
. CA	2235	481			AA		1997	0501	C	CA	1996-	2235	481		1	9961023	
JA	9674	710			A1		1997	0515	P	Æ.	1996-	7471	0		1	9961023	
14	7062	62			B2		1999	0610									
EI	8667	10			A1		1998	0930	E	ΞP	1996-	9369	06		1	9961023	
	R:	ΑT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR	, IT,	LI,	LU,	NL,	SE,	MC,	
		PT,	IE,	FI													
Cl	1201	393			A		1998	1209	(CN	1996-	1978	27		1	9961023	
	9802						1999	0201	F	UL	1998-	2319			1	9961023	
BI	9611 2000	210			Α		1999	1228								9961023	
JI	2000	5133	24		T2			1010			1997-					9961023	
US	6008	208			Α		1999	1228	Ţ	JS	1997-	8788	68		. 1	9970619	
	9801				Α			0622	1	10	1998-	1810			1	9980422	
US	6413	998			B1		2002	0702	Ţ	JS	1999-	4538	28		1	9991202	
PRIORI	ry App	LN.	INFO	.:					Ţ	JS	1995-	-5830	Р		P 1	9951023	
									т	TS.	1996-	-7358	75		B1 1	9961023	
											1770	. 5 5 0					
										NO	1996	-US17	019		W 1	9961023	
•									τ	JS	1997	-8788	68		A3 1	9970619	

OTHER SOURCE(S):

MARPAT 127:17703

GΙ

AB A method for treating deficient bone growth and/or undesirable bone resorption comprises administration of compds. comprising 2 (substituted) aromatic systems spaced apart by a linker of 1.5-15 Å, is claimed. Thus, dithizone was refluxed in EtOH/HOAc for 18 h to give 25% title compound (I). In a calvarial bone growth assay, I induced a 4-fold increase in width of new calvarial bone vs. controls.

IT 190436-31-8 190436-38-5

(preparation of (hetero)aromatic compds. for treating bone deficit conditions)

RN 190436-31-8 HCAPLUS

CN 5(1H)-Cinnolinone, 3-(4-chloro-3-methylphenyl)-4,6,7,8-tetrahydro-7,7-dimethyl- (9CI) (CA INDEX NAME)

RN 190436-38-5 HCAPLUS
CN 5(1H)-Cinnolinone, 3-(4-bromophenyl)-4,6,7,8-tetrahydro-7,7-dimethyl(9CI) (CA INDEX NAME)

conditions)

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IC
     ICM A61K031-54
     28-20 (Heterocyclic Compounds (More Than One Hetero Atom))
CC
     Section cross-reference(s): 1, 25, 27
                                                   1138-15-4
                                        961-60-4
                                                                1694-45-7
IT
     100-10-7
                 479-13-0
                            619-67-0
                                                                    10205-62-6
                                                       7477-46-5
     2390-54-7
                              6019-43-8
                                           7477-43-2
                  4765-56-4
                                19736-41-5
                                              22765-52-2
                                                            22765-57-7
     10360-31-3
                   15826-37-6
                                                            37052-98-5
                                33757-75-4
                                              34580-14-8
     28620-82-8
                   33357-46-9
                                48189-64-6
                                              49582-19-6
                                                            52869-16-6
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                   38101-92-7
                                                            77038-70-1
                                62225-55-2
                                              73548-13-7
                   57601-14-6
     53846-93-8
                                              84088-42-6
                                                            93873-08-6
                   77669-19-3
                                80998-91-0
     77143-59-0
                                                 116249-87-7
                                                                129855-33-0
                    110490-58-9
                                   112535-18-9
     108608-01-1
                                                                143816-39-1
                                                 139233-22-0
     131136-84-0
                    133124-80-8
                                 133928-85-5
                                                                190436-27-2
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                                   182572-98-1
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                                   190436-35-2 190436-38-5
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                                   190436-67-0
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                    190436-79-4
                                                 190436-87-4
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                                   190436-83-0
                                                 190437-08-2
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                    190437-42-4
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     190437-46-8
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                    190437-63-9
     190437-62-8
                                                                190437-71-9
                                                  190437-70-8
                                   190437-69-5
                    190437-68-4
     190437-67-3
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                                                  190437-75-3
                                   190437-74-2
     190437-72-0
                    190437-73-1
                                                                190437-81-1
                                                  190437-80-0
                    190437-78-6
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     190437-77-5
                                                                190437-86-6
                                                  190437-85-5
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                    190437-88-8
                                   190437-89-9
     190437-87-7
                                                                190437-96-8
                                   190437-94-6
                                                  190437-95-7
                    190437-93-5
     190437-92-4
                                   190438-00-7
     190437-98-0
                    190437-99-1
         (preparation of (hetero)aromatic compds. for treating bone deficit
```

HCAPLUS COPYRIGHT 2006 ACS on STN L60 ANSWER 10 OF 16

1996:668766 HCAPLUS Full-text ACCESSION NUMBER:

DOCUMENT NUMBER: 125:328539

Heteroannulation of cyclic enaminone and dimedone TITLE:

Assy, M. G.; Motti, F. M. Abd-El AUTHOR(S):

Chem. Dep., Fac. Sci., Zagazig Univ., Cairo, Egypt CORPORATE SOURCE:

Egyptian Journal of Chemistry (1996), 39(6), SOURCE:

581-586

CODEN: EGJCA3; ISSN: 0367-0422

National Information and Documentation Centre PUBLISHER:

Journal DOCUMENT TYPE: English LANGUAGE:

GΙ

Heteroannulation of a cyclic enaminone and dimedone were investigated. E.g., AB reaction of dimedone and benzil monohydrazone in Et3N/EtOH gave 80% phthalazinone I. Also prepared were quinolino[2,3-d]pyrimidinones and a quinazolinone derivative

178243-83-9P

(heteroannulation of cyclic enaminone and dimedone)

178243-83-9 HCAPLUS RN

5(6H)-Cinnolinone, 7,8-dihydro-7,7-dimethyl-3,4-diphenyl- (9CI) (CA INDEX NAME)

28-1 (Heterocyclic Compounds (More Than One Hetero Atom)) CC 156496-74-1P 156496-75-2P 178243-75-9P 178243-80-6P 2826-26-8P IT

178243-83-9P

(heteroannulation of cyclic enaminone and dimedone)

HCAPLUS COPYRIGHT 2006 ACS on STN L60 ANSWER 11 OF 16

ACCESSION NUMBER: 1996:309837 HCAPLUS Full-text DOCUMENT NUMBER:

125:58438

TITLE:

AUTHOR(S):

Heteroannulation of cyclic enaminone and dimedone

Assy, M. G.; Abd-Ell Motti, F. M.

CORPORATE SOURCE:

Fac. Sci., Zagazig Univ., Dokki-Cairo, Egypt Indian Journal of Chemistry, Section B: Organic

Chemistry Including Medicinal Chemistry (1996),

35B(6), 608-61.0

SOURCE:

CODEN: IJSBDB; ISSN: 0376-4699

Publications & Information Directorate, CSIR PUBLISHER:

DOCUMENT TYPE: Journal English

LANGUAGE:

GΙ

Enaminone I undergoes cyclization with benzylidenes ArCH:C(CN)2 (Ar = Ph, 4-AΒ ClC6H4, 4-MeOC6H4) to give quinolines II which are converted into quinolinopyrimidines III by treatment with benzoyl isothiocyanate. Cyclocondensation of I with benzoyl isothiocyanate furnishes quinazolone IV.

178243-83-9P IT

(heteroannulation of cyclic enaminone and dimedone)

178243-83-9 HCAPLUS RN

5(6H)-Cinnolinone, 7,8-dihydro-7,7-dimethyl-3,4-diphenyl- (9CI) CN INDEX NAME)

$$\stackrel{\text{Me}}{\longrightarrow} \stackrel{\text{N}}{\longrightarrow} \stackrel{\text{N}}{$$

28-16 (Heterocyclic Compounds (More Than One Hetero Atom)) CC 178243-80-6P **178243-83-9P** 532-55-8P, Benzoyl isothiocyanate IT (heteroannulation of cyclic enaminone and dimedone)

L60 ANSWER 12 OF 16 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER:

1995:769330 HCAPLUS Full-text

DOCUMENT NUMBER:

123:339962

TITLE:

The synthesis of pyridazine and fused pyridazine

Assy, M. G.; Abd El-Ghani, E.

AUTHOR(S): CORPORATE SOURCE:

Chem. Dep., Fac. Sci. Zagazig Univ., Zagazig,

Egypt

SOURCE:

Polish Journal of Chemistry (1995), 69(5), 685-7

CODEN: PJCHDQ; ISSN: 0137-5083

PUBLISHER:

Polish Chemical Society

DOCUMENT TYPE:

Journal

LANGUAGE:

English

AB The synthesis of pyridazine and fused pyridazine derivs. by the reaction of benzil monohydrazone and activated keto methylene reagents is reported.

IT 170701-14-1P

(synthesis of pyridazines and fused pyridazines)

RN 170701-14-1 HCAPLUS

CN 5(6H)-Cinnolinone, 7,8-dihydro-3,4-diphenyl- (9CI) (CA INDEX NAME)

CC 28-15 (Heterocyclic Compounds (More Than One Hetero Atom))

IT 170701-14-1P

(synthesis of pyridazines and fused pyridazines)

L60 ANSWER 13 OF 16 HCAPLUS COPYRIGHT 2006 ACS on STN ACCESSION NUMBER: 1987:156384 HCAPLUS Full-text

ACCESSION NUMBER: DOCUMENT NUMBER:

106:156384

TITLE:

Synthesis and reactions of 4,6,7,8-tetrahydro-

5(1H)-cinnolinones

AUTHOR(S):

Nagarajan, K.; Shah, R. K.; Shenoy, S. J.

CORPORATE SOURCE:

Res. Cent., Hindustan CIBA-GEIGY Ltd., Bombay, 400

063, India

Journal

SOURCE:

Indian Journal of Chemistry, Section B: Organic Chemistry Including Medicinal Chemistry (1986),

25B(7), 697-708

CODEN: IJSBDB; ISSN: 0376-4699

DOCUMENT TYPE:

LANGUAGE: English

OTHER SOURCE(S):

CASREACT 106:156384

GΙ

AB (Oxoalkyl)dimedones I (R = Me, R1 = Ph, Me, R2 = H; R = R2 = H, Me, R1 = Ph) underwent cyclization with hydrazines to give cinnolinones II [R3 = H, Me2NCH2CH2, Et2NCH2CH2, Me2N(CH2)3]. The partially aromatized oximes III (R = Me, R1 = Ph, Me; R = H, R1 = Ph) were prepared from II. III on treatment with polyphosphoric acid underwent Semmler-Wolff aromatization to give aminocinnolines IV.

IT 51940-66-0 51940-73-9 58136-95-1 58137-00-1 58137-14-7 58137-20-5

(oximation of)

RN 51940-66-0 HCAPLUS

CN 5(1H)-Cinnolinone, 4,6,7,8-tetrahydro-7,7-dimethyl-3-phenyl- (9CI) (CA INDEX NAME)

$$\begin{array}{c} \text{Me} \\ \text{Me} \\ \end{array} \begin{array}{c} \text{H} \\ \text{N} \\ \text{Ph} \end{array}$$

RN 51940-73-9 HCAPLUS

CN 5(1H)-Cinnolinone, 4,6,7,8-tetrahydro-3-phenyl- (9CI) (CA INDEX NAME)

RN 58136-95-1 HCAPLUS

CN 5(1H)-Cinnolinone, 4,6,7,8-tetrahydro-1,7,7-trimethyl-3-phenyl- (9CI) (CA INDEX NAME)

RN 58137-00-1 HCAPLUS

CN 5(1H)-Cinnolinone, 1-[2-(diethylamino)ethyl]-4,6,7,8-tetrahydro-7,7-dimethyl-3-phenyl- (9CI) (CA INDEX NAME)

$$\begin{array}{c} \text{Me} \\ \text{Me} \\ \\ \text{N} \\ \\ \text{Ph} \end{array}$$

RN 58137-14-7 HCAPLUS

CN 5(1H)-Cinnolinone, 1-[2-(dimethylamino)ethyl]-4,6,7,8-tetrahydro-7,7-dimethyl-3-phenyl- (9CI). (CA INDEX NAME)

$$\begin{array}{c} \text{CH}_2-\text{CH}_2-\text{NMe}_2 \\ \text{Me} \\ \end{array}$$

RN 58137-20-5 HCAPLUS

CN 5(1H)-Cinnolinone, 1-[3-(dimethylamino)propyl]-4,6,7,8-tetrahydro-7,7-dimethyl-3-phenyl- (9CI) (CA INDEX NAME)

IT 58136-96-2P

(preparation and oximation of)

RN 58136-96-2 HCAPLUS

CN 5(1H)-Cinnolinone, 4,6,7,8-tetrahydro-7,7-dimethyl-1,3-diphenyl- (9CI) (CA INDEX NAME)

IT 51940-67-1P

(preparation and reduction of)

'RN 51940-67-1 HCAPLUS

CN 5(6H)-Cinnolinone, 7,8-dihydro-7,7-dimethyl-3-phenyl- (9CI) (CA INDEX NAME)

IT 107651-60-5P 107651-78-5P 107651-79-6P 107651-93-4P 107651-96-7P

(preparation of)

RN 107651-60-5 HCAPLUS

CN 5(1H)-Cinnolinone, 4,6,7,8-tetrahydro-4,7,7-trimethyl-1,3-diphenyl-(9CI) (CA INDEX NAME)

RN 107651-78-5 HCAPLUS

CN 5(1H)-Cinnolinone, 4,6,7,8-tetrahydro-4-hydroxy-7,7-dimethyl-3-phenyl-(9CI) (CA INDEX NAME)

$$\begin{array}{c} \text{Me} \\ \text{Me} \\ \\ \text{N} \\ \\ \text{OH} \end{array}$$

RN 107651-79-6 HCAPLUS

CN 5-Cinnolinol, 5,6,7,8-tetrahydro-7,7-dimethyl-3-phenyl- (9CI) (CA INDEX NAME)

$$Me$$
 N
 N
 N
 Ph

RN 107651-93-4 HCAPLUS

CN 5(6H)-Cinnolinone, 7,8-dihydro-6-hydroxy-7,7-dimethyl-3-phenyl-6-[[5,6,7,8-tetrahydro-5-(hydroxyimino)-7,7-dimethyl-3-phenyl-6-

RN107651-96-7 HCAPLUS 5(6H)-Cinnolinone, 6-chloro-7,8-dihydro-7,7-dimethyl-3-phenyl- (9CI) CN (CA INDEX NAME)

$$\begin{array}{c} \text{Me} \\ \text{Me} \\ \text{Cl} \end{array} \qquad \begin{array}{c} \text{N} \\ \text{Ph} \end{array}$$

CC

```
51940-72-8 51940-73-9
IT
     51940-66-0
     58136-95-1 58137-00-1 58137-14-7
     58137-20-5
        (oximation of)
                   107651-70-7P
                                   107651-72-9P
ΙT
     58136-96-2P
        (preparation and oximation of)
IT
     51940-67-1P
        (preparation and reduction of)
                                                      51940-74-0P
     10604-22-5P, 3-Phenylcinnoline
                                       33553-23-0P
IT
     51940-75-1P
                   57822-05-6P
                                  102948-42-5P 107651-60-5P
     107651-61-6P
                    107651-62-7P
                                    107651-63-8P
                                                   107651-64-9P ·
                                                    107651-74-1P
                    107651-67-2P
                                    107651-73-0P
     107651-65-0P
                                    107651-77-4P 107651-78-5P
                    107651-76-3P
     107651-75-2P
                    107651-80-9P
                                    107651-82-1P
                                                    107651-83-2P
     107651-79-6P
                                                    107651-89-8P
                    107651-87-6P
                                    107651-88-7P
     107651-85-4P
                                    107651-92-3P 107651-93-4P
     107651-90-1P
                     107651-91-2P
                     107651-95-6P 107651-96-7P
                                                 107651-97-8P
     107651-94-5P
     107700-84-5P
        (preparation of)
```

28-15 (Heterocyclic Compounds (More Than One Hetero Atom))

HCAPLUS COPYRIGHT 2006 ACS on STN L60 ANSWER 14 OF 16 1983:207886 HCAPLUS Full-text ACCESSION NUMBER: DOCUMENT NUMBER: 98:207886

3-Phenyl-5-oxo-7,7-dimethyl-1(H),4(H)-5,6,7,8-TITLE:

tetrahydrobenzo[c]pyridazine, C16H18N2O

Padmanabhan, P. V.; Ramadas, S. R.; Varghese, AUTHOR(S):

Babu; Srinivasan, S.

Dep. Chem., Indian Inst. Technol., Madras, 600 CORPORATE SOURCE:

036, India

Crystal Structure Communications (1982), 11(4, Pt. SOURCE:

A), 1277-82

CODEN: CSCMCS; ISSN: 0302-1742

DOCUMENT TYPE:

Journal English

LANGUAGE:

The title compound is orthorhombic, space group Pbca, with a 9.158(2), b 11.424(7) and c 25.783(4) Å; Z = 8 for dc = 1.253 and do= 1.250. The structure was solved by direct methods and refined by full-matrix least squares to a final R = 0.059. Atomic coordinates are given. The C5-O (1.265 Å) and C9-C1O (1.379 Å) values are larger than the usual values (1.23 Å for C = 0 and 1.337 Å for C = C) reported in the International Tables (1968). This can be attributed to the conjugation of the lone pair of N1 with the carbonyl function via the double bond.

IT 51940-66-0

(structure of)

RN 51940-66-0 HCAPLUS

CN 5(1H)-Cinnolinone, 4,6,7,8-tetrahydro-7,7-dimethyl-3-phenyl- (9CI) (CA INDEX NAME)

$$\begin{array}{c} \text{Me} \\ \text{Me} \\ \end{array} \begin{array}{c} \text{H} \\ \text{N} \\ \text{Ph} \end{array}$$

CC 75-8 (Crystallography and Liquid Crystals)

Section cross-reference(s): 28

IT 51940-66-0

(structure of)

L60 ANSWER 15 OF 16 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1976:130128 HCAPLUS Full-text

DOCUMENT NUMBER:

84:130128

TITLE:

Central nervous system active 5-oxo-1,4,5,6,7,8-

hexahydrocinnolines

AUTHOR(S):

Nagarajan, Kuppuswamy; David, Joy; Shah, Rashmi K.

CORPORATE SOURCE:

Ciba-Geigy Res. Cent., Bombay, India

SOURCE:

Journal of Medicinal Chemistry (1976), 19(4),

508-11

CODEN: JMCMAR; ISSN: 0022-2623

DOCUMENT TYPE:

Journal

LANGUAGE:

English

OTHER SOURCE(S):

CASREACT 84:130128

GΙ

AB Among a series of 5-oxo-1,4,5,6,7,8-hexahydrocinnolines (I) examined for central nervous system activity, 1-(2-diethylaminoethyl)-3-(p-fluorophenyl)-7,7-dimethyl-5-oxo-1,4,5,6,7,8-hexahydrocinnoline [58137-07-8] and 1-(2-dimethylaminoethyl)-3-phenyl-5-oxo-7,7-dimethyl-1,4,5,6,7,8-hexahydrocinnoline monoperchlorate [58137-15-8] had sedative and anticonvulsant properties and were also active in tests used to characterize antidepressants. However, their narrow safety margin precludes clin. study. Derivs. of 2-(ω-phenacyl)-3-hydrazino-5,5-dimethyl-2-cyclohexenone were active in tests used to characterize antidepressants and were weakly sedative but not anticonvulsant. Structure-activity relationships are discussed.

IT 51940-67-1

(pharmacol. of)

RN 51940-67-1 HCAPLUS

CN 5(6H)-Cinnolinone, 7,8-dihydro-7,7-dimethyl-3-phenyl- (9CI) (CA INDEX NAME)

$$\stackrel{\text{Me}}{\longrightarrow} \stackrel{\text{N}}{\longrightarrow} \stackrel{\text{N}}{\longrightarrow} \stackrel{\text{N}}{\longrightarrow} \stackrel{\text{N}}{\longrightarrow} \stackrel{\text{Ph}}{\longrightarrow} \stackrel{\text{Ph}}{\longrightarrow} \stackrel{\text{N}}{\longrightarrow} \stackrel{\text{N}$$

IT 51940-66-0P 58136-95-1P 58136-96-2P
58136-98-4P 58136-99-5P 58137-01-2P
58137-03-4P 58137-05-6P 58137-06-7P
58137-07-8P 58137-09-0P 58137-11-4P
58137-15-8P 58137-17-0P 58137-19-2P
58137-21-6P 58137-22-7P 58137-24-9P
(preparation and pharmacol. of)

RN 51940-66-0 HCAPLUS
CN 5(1H)-Cinnolinone, 4,6,7,8-tetrahydro-7,7-dimethyl-3-phenyl- (9CI)
(CA INDEX NAME)

RN 58136-95-1 HCAPLUS
CN 5(1H)-Cinnolinone, 4,6,7,8-tetrahydro-1,7,7-trimethyl-3-phenyl- (9CI)
(CA INDEX NAME)

RN 58136-96-2 HCAPLUS

CN 5(1H)-Cinnolinone, 4,6,7,8-tetrahydro-7,7-dimethyl-1,3-diphenyl- (9CI) (CA INDEX NAME)

RN 58136-98-4 HCAPLUS

CN 5(1H)-Cinnolinone, 4,6,7,8-tetrahydro-1-(2-hydroxyethyl)-7,7-dimethyl-3-phenyl-, mono(4-methylbenzenesulfonate) (salt) (9CI) (CA INDEX NAME)

CM 1

CRN 58136-97-3 CMF C18 H22 N2 O2

CM 2

CRN 104-15-4 CMF C7 H8 O3 S

RN 58136-99-5 HCAPLUS

CN 1(4H)-Cinnolinecarboxamide, 5,6,7,8-tetrahydro-7,7-dimethyl-5-oxo-3-phenyl- (9CI) (CA INDEX NAME)

$$\begin{array}{c} \text{Me} \\ \text{Me} \\ \text{Me} \\ \end{array}$$

RN 58137-01-2 HCAPLUS

CN 5(1H)-Cinnolinone, 1-[2-(diethylamino)ethyl]-4,6,7,8-tetrahydro-7,7-dimethyl-3-phenyl-, monoperchlorate (9CI) (CA INDEX NAME)

.CM 1

CRN 58137-00-1 CMF C22 H31 N3 O

CM 2

CRN 7601-90-3 CMF Cl H O4

RN 58137-03-4 HCAPLUS

CN 5(1H)-Cinnolinone, 1-[2-(diethylamino)ethyl]-4,6,7,8-tetrahydro-4,7,7-trimethyl-3-phenyl-, perchlorate (2:3) (9CI) (CA INDEX NAME)

CM 1

CRN 58137-02-3 CMF C23 H33 N3 O

CM 2

CRN 7601-90-3 CMF Cl H O4

RN 58137-05-6 HCAPLUS

CN 5(1H)-Cinnolinone, 1-[2-(diethylamino)ethyl]-4,6,7,8-tetrahydro-3-(4-methoxyphenyl)-7,7-dimethyl-, monoperchlorate (9CI) (CA INDEX NAME)

CM 1

CRN 58137-04-5 CMF C23 H33 N3 O2

CM 2

CRN 7601-90-3 CMF Cl H O4

RN 58137-06-7 HCAPLUS

CN 5(1H)-Cinnolinone, 3-(4-bromophenyl)-1-[2-(diethylamino)ethyl]-4,6,7,8-tetrahydro-7,7-dimethyl- (9CI) (CA INDEX NAME)

RN 58137-07-8 HCAPLUS

CN 5(1H)-Cinnolinone, 1-[2-(diethylamino)ethyl]-3-(4-fluorophenyl)-4,6,7,8-tetrahydro-7,7-dimethyl- (9CI) (CA INDEX NAME)

RN 58137-09-0 HCAPLUS

CN 5(1H)-Cinnolinone, 1-[2-(diethylamino)ethyl]-4,6,7,8-tetrahydro-7,7-dimethyl-3-(3,4,5-trimethoxyphenyl)-, monoperchlorate (9CI) (CA INDEX NAME)

CM 1

CRN 58137-08-9 CMF C25 H37 N3 O4

CM 2

CRN 7601-90-3 CMF Cl H O4

RN 58137-11-4 HCAPLUS

CN 5(1H)-Cinnolinone, 1-[2-(diethylamino)ethyl]-4,6,7,8-tetrahydro-3-phenyl-, monoperchlorate (9CI) (CA INDEX NAME)

CM 1

CRN 58137-10-3 CMF C20 H27 N3 O

CM 2

CRN 7601-90-3 CMF Cl H O4

RN 58137-15-8 HCAPLUS

CN 5(1H)-Cinnolinone, 1-[2-(dimethylamino)ethyl]-4,6,7,8-tetrahydro-7,7-dimethyl-3-phenyl-, monoperchlorate (9CI) (CA INDEX NAME)

CM 1

CRN 58137-14-7 CMF C20 H27 N3 O

$$\begin{array}{c} \text{CH}_2-\text{CH}_2-\text{NMe}_2 \\ \text{Me} \\ \\ \text{N} \\ \\ \text{Ph} \end{array}$$

CM 2

CRN 7601-90-3 CMF Cl H O4

RN 58137-17-0 HCAPLUS

CN 5(1H)-Cinnolinone, 3-(4-bromophenyl)-1-[2-(dimethylamino)ethyl]-4,6,7,8-tetrahydro-7,7-dimethyl-, monoperchlorate (9CI) (CA INDEX NAME)

CM 1

CRN 58137-16-9 CMF C20 H26 Br N3 O

$$\begin{array}{c} \text{CH}_2-\text{CH}_2-\text{NMe}_2 \\ \text{Me} \\ \\ \text{N} \\ \\ \text{Br} \end{array}$$

CM 2 ·

CRN 7601-90-3 CMF Cl H O4

RN 58137-19-2 HCAPLUS

CN 5(1H)-Cinnolinone, 1-[2-(dimethylamino)ethyl]-3-(4-fluorophenyl)-4,6,7,8-tetrahydro-7,7-dimethyl-, ethanedioate (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 58137-18-1 CMF C20 H26 F N3 O

$$\begin{array}{c} \text{Me} \\ \text{Me} \\ \end{array}$$

CM 2

CRN 144-62-7 CMF C2 H2 O4

RN 58137-21-6 HCAPLUS

CN 5(1H)-Cinnolinone, 1-[3-(dimethylamino)propyl]-4,6,7,8-tetrahydro-7,7-dimethyl-3-phenyl-, monoperchlorate (9CI) (CA INDEX NAME)

CM 1

CRN 58137-20-5 CMF C21 H29 N3 O

$$\begin{array}{c} \text{Me} \\ \text{Me} \\ \\ \text{Me} \\ \\ \end{array}$$

CRN 7601-90-3 CMF Cl H O4

RN 58137-22-7 HCAPLUS

CN 5(1H)-Cinnolinone, 3-(4-bromophenyl)-4,6,7,8-tetrahydro-7,7-dimethyl-1-[2-(1-piperazinyl)ethyl]-, dihydrochloride (9CI) (CA INDEX NAME)

$$\begin{array}{c} H \\ N \\ CH_2 \\ CH_2 \\ \end{array}$$
 Me
$$\begin{array}{c} Me \\ N \\ N \\ \end{array}$$
 Br

●2 HCl

RN 58137-24-9 HCAPLUS

CN 5(1H)-Cinnolinone, 3-(4-fluorophenyl)-4,6,7,8-tetrahydro-7,7-dimethyl-1-[2-(1-piperazinyl)ethyl]-, bis(4-methylbenzenesulfonate) (9CI) (CA INDEX NAME)

CM 1

CRN 58137-23-8 CMF C22 H29 F N4 O

CM . 2

CRN 104-15-4 CMF C7 H8 O3 S

CC 1-3 (Pharmacodynamics)
 Section cross-reference(s): 28
IT 51940-67-1
 (pharmacol. of)

TT 51940-66-0P 51940-72-8P 58136-95-1P 58136-96-2P 58136-98-4P 58136-99-5P 58137-01-2P 58137-03-4P 58137-05-6P 58137-06-7P 58137-07-8P 58137-09-0P 58137-11-4P 58137-13-6P 58137-15-8P 58137-22-7P 58137-2P 58137-26-1P 58137-22-7P 58137-24-9P 58137-26-1P 58137-20-3P 58137-24-9P 58137-30-7P 58137-30-7P

58137-22-7P 58137-24-9P 58137-26-1P 58137-27-2P 58137-28-3P 58137-29-4P 58137-30-7P 58137-31-8P (preparation and pharmacol. of)

L60 ANSWER 16 OF 16 HCAPLUS COPYRIGHT 2006 ACS on STN ACCESSION NUMBER: 1974:120854 HCAPLUS Full-text

DOCUMENT NUMBER: 80

80:120854

TITLE:

Novel formation of 5-aminocinnolines from 5-oxo-5,6,7,8-tetrahydrocinnolines. Abnormal course of Schmidt and Beckmann rearrangement

AUTHOR(S): Nagarajan, Kuppuswamy; Shah, Ralhmi K.

CORPORATE SOURCE:

Res. Cent., CIBA, Bombay, India

SOURCE:

Journal of the Chemical Society, Chemical

Communications (1973), (24), 926-7 CODEN: JCCCAT; ISSN: 0022-4936

DOCUMENT TYPE: Journal LANGUAGE: English

GI For diagram(s), see printed CA Issue.

The 5-oxo-5,6,7,8-tetrahydrocinnoline I (R = Ph, R1 = Me, X = 0) with NaN3-AB H2SO4 for 2 hr at room temperature gave 75% II. II (R = Ph, R1 = Me, H; R = R1 = Me) were also prepared in 50-95% yield by reaction of the corresponding I (X = NOH) with polyphosphoric acid.

51940-66-0P 51940-67-1P 51940-73-9P IT

(preparation of)

RN 51940-66-0 HCAPLUS

5(1H)-Cinnolinone, 4,6,7,8-tetrahydro-7,7-dimethyl-3-phenyl- (9CI) CN (CA INDEX NAME).

$$\stackrel{\text{Me}}{\longrightarrow} \stackrel{\text{H}}{\longrightarrow} \stackrel{\text{N}}{\longrightarrow} \stackrel{\text{N}}{\longrightarrow} \stackrel{\text{Ph}}{\longrightarrow} \stackrel{\text{Ph}} \longrightarrow \stackrel{\text{Ph}}{\longrightarrow} \stackrel{\text{Ph}}{\longrightarrow} \stackrel{\text{Ph}}{\longrightarrow} \stackrel{\text{Ph}}{\longrightarrow} \stackrel{\text{Ph}}$$

51940-67-1 HCAPLUS RN

5(6H)-Cinnolinone, 7,8-dihydro-7,7-dimethyl-3-phenyl- (9CI) (CA INDEX CN NAME)

RN 51940-73-9 HCAPLUS

5(1H)-Cinnolinone, 4,6,7,8-tetrahydro-3-phenyl- (9CI) (CA INDEX NAME) CN

28-16 (Heterocyclic Compounds (More Than One Hetero Atom)) CC

Section cross-reference(s): 22

51940-66-0P 51940-67-1P 51940-68-2P 51940-70-6P IT 51940-72-8P **51940-73-9P** 51940-74-0P 51940-71-7P 51940-75-1P 51940-76-2P (preparation of)

=> sel 156 hit rn 1-E145 THROUGH E421 ASSIGNED

=> => d 163 1-13 ibib abs fhitstr hitind

L63 ANSWER 1 OF 13 HCAPLUS COPYRIGHT 2006 ACS ON STN ACCESSION NUMBER: 2006:916151 HCAPLUS Full-text

ACCESSION NUMBER: DOCUMENT NUMBER:

145:293077

TITLE:

Preparation of cinnoline-based prodrugs for treating diseases or disorders of Liver X

receptors

· INVENTOR(S):

Hu, Baihua; Wrobel, Jay E.; Collini, Michael

David; Unwalla, Rayomand J.

PATENT ASSIGNEE(S):

Wyeth, John, and Brother Ltd., USA

SOURCE:

PCT Int. Appl., 158pp.

50011021

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PAT	PATENT NO.)	DATE		APPLICATION NO.						DATE		
	- 					-							. -				
MO	2,0060	9403	4					WO 2006-US7224									
	W:	ΑE,	AG,	AL,	AM,	AT,	AU,	ΑZ,	BA,	BB,	BG,	Β̈R,	BW,	BY,	BZ,	CA,	
		CH,	CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	EG,	ES,	FI,	
		GB,	GD,	GE,	GH,	GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KΕ,	KG,	KM,	
		KN,	KP,	KR,	KZ,	LC,	LK,	LR,	LS,	LT,	LU,	LV,	LY,	MA,	$ ext{MD}$,	MG,	
		MK,	MN,	MW,	MX,	MZ,	NA,	NG,	NI,	NO,	NZ,	OM,	PG,	ΡH,	PL,	PT,	
		RO,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	SM,	SY,	TJ,	TM,	TN,	TR,	TT,	
		TZ,	UA,	UG,	US,	UZ,	VC,	VN,	YU,	ZA,	ZM,	zw					
	RW:	AT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	EE,	ES,	FI,	FR,	GB,	GR,	HU,	
		ΙE,	IS,	IT,	LT,	LU,	LV,	MC,	NL,	PL,	PT,	RO,	SE,	SI,	SK,	TR,	
		BF,	ВJ,	CF,	CG,	CI,	CM,	GA,	GN,	GQ,	GW,	ΜL,	MR,	ΝE,	SN,	TD,	
		TG,	BW,	GH,	GM,	KE,	LS,	MW,	MZ,	NA,	SD,	SL,	SZ,	TZ,	UG,	ZM,	
		ZW,	AM,	AZ,	BY,	KG,	KZ,	MD,	RU,	ΤJ,	TM						
US	20062	25275	57		A1		20063	1109	Ţ	JS 20	006-3	36575	50		20	0060301	
PRIORITY	APPI	LN.	NFO.	. :					Ţ	JS 20	005-6	5572	96P]	2 (0050301	

OTHER SOURCE(S):

MARPAT 145:293077

GΙ

$$\mathbb{R}^4$$
 \mathbb{R}^3
 \mathbb{R}^2
 \mathbb{R}^1
 \mathbb{R}^3
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 \mathbb{R}^3
 \mathbb

Cinnoline-based prodrugs I, wherein Rl is H, (un)substituted alkyl, (un)substituted aryl, etc.; R2 is (un)substituted aryl or heteroaryl, (un)substituted cycloalkyl, etc.; R3-R6 are independently H, halo, (un)substituted amino, azido, hydroxy, etc. are prepared for use as Liver X receptor modulators. Thus, II was prepared and tested in ABCA1 gene regulation in THP-1 cells and for binding in human LXR β cells (no data, however EC50 is in the range of 0.01 to 15 μ M and IC50 is between 0.001 and 20 μ M resp.). Further, I can find utility in the treatment and inhibition of atherosclerosis and atherosclerotic lesions, lowering LDL cholesterol levels,

increasing HDL cholesterol levels, increasing reverse cholesterol transport, inhibiting cholesterol absorption, treatment or inhibition of Alzheimer's disease, type I diabetes, type II diabetes, multiple sclerosis, rheumatoid arthritis, acute coronary syndrome, restenosis, inflammatory bowel disease, Crohn's disease, endometriosis, celiac, and thyroiditis.

IT 908565-71-9P

(preparation of cinnoline-based prodrugs for treating diseases or disorders of Liver X receptors)

- RN 908565-71-9 HCAPLUS
- CN Benzenamine, 3-(8-chloro-3-phenyl-4-cinnolinyl)- (9CI) (CA INDEX NAME)

```
28-15 (Heterocyclic Compounds (More Than One Hetero Atom))
CC
     Section cross-reference(s): 1, 63
     908565-71-9P 908565-74-2P 908565-77-5P
IT
                    908565-82-2P 908565-91-3P
     908565-79-7P
     908565-93-5P 908566-07-4P
        (preparation of cinnoline-based prodrugs for treating diseases or
        disorders of Liver X receptors)
IT
     856179-41-4P
                    908565-58-2P 908565-60-6P
     908565-62-8P 908565-64-0P 908565-66-2P
     908565-75-3P 908565-76-4P 908565-78-6P
                    908565-84-4P
                                    908565-85-5P
                                                   908565-86-6P
     908565-83-3P
     908565-87-7P 908565-88-8P 908565-89-9P
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     908565-98-0P 908566-00-7P
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     908566-18-7P 908566-19-8P
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     908566-26-7P
                    908566-27-8P
                                    908566-36-9P
                                                   908566-37-0P
     908566-30-3P
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                                    908566-40-5P
                                                   908566-41-6P
     908566-38-1P
                                                   908566~45-0P
                                    908566-44-9P
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     908566-47-2P
                    908566-48-3P
                                    908566-53-0P
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                                                   908566-58-5P
     908566-55-2P
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                    908566-60-9P
                                                   908566-62-1P
     908566-59-6P
                    908566-64-3P
                                    908566-66-5P
                                                   908566-69-8P
     908566-63-2P
                                    908566-72-3P
                                                   908566-73-4P
     908566-70-1P
                    908566-71-2P
     908566-74-5P
```

(preparation of cinnoline-based prodrugs for treating diseases or disorders of Liver X receptors)

```
18389-87-2P 177962-07-1P 854778-19-1P
                                                908565-59-3P
IT
                    908565-67-3P 908565-68-4P
     908565-65-1P
     908565-69-5P 908565-70-8P 908565-72-0P
     908565-73-1P 908565-80-0P 908565-81-1P
                                                   908565-99-1P
     908566-16-5P
                    908566-32-5P
                                    908566-33-6P 908566-34-7P
     908566-35-8P
        (preparation of cinnoline-based prodrugs for treating diseases or
        disorders of Liver X receptors)
                               THERE ARE 12 CITED REFERENCES AVAILABLE FOR
REFERENCE COUNT:
                         12
                               THIS RECORD. ALL CITATIONS AVAILABLE IN THE
                                RE FORMAT
L63 ANSWER 2 OF 13 HCAPLUS COPYRIGHT 2006 ACS on STN
                         2006:469819 HCAPLUS Full-text
ACCESSION NUMBER:
DOCUMENT NUMBER:
                          144:488643
                          Preparation o f pyridine, thiazole and other
TITLE:
                         heteroaryl imine compounds as cannabinoid receptor
                          agonist
                          Saito, Shiuji; Ohta, Hiroshi; Ishizaka, Tomoko;
INVENTOR(S):
                          Yoshinaga, Mitsukane; Tatsuzuki, Makoto; Yokobori,
                          Yuji; Tomishima, Yasumitsu; Morita, Aki; Toda,
                          Yoshihisa; Tokugawa, Kimiko; Kaku, Ayaka;
                          Murakami, Tomomi; Yoshimura, Hiromitsu; Sekine,
                          Shingo; Yoshimizu, Takao
                          Taisho Pharmaceutical Co., Ltd., Japan
PATENT ASSIGNEE(S):
SOURCE:
                          PCT Int. Appl., 359 pp.
                          CODEN: PIXXD2
DOCUMENT TYPE:
                          Patent
                          Japanese
LANGUAGE:
FAMILY ACC. NUM. COUNT:
PATENT INFORMATION:
                                             APPLICATION NO.
                                                                     DATE
                          KIND
                                 DATE
     PATENT NO.
                                             _______
                                           WO 2005-JP19977
                                                                     20051031
                                 20060518
     WO 2006051704
                          A1
         W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA,
             CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM,
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		MK,	MN,	MW,	MX,	MZ,	NA,	NG,	NI,	NO,	NZ,	OM,	PG,	PH,	PL,	PT,
		RO,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	SM,	SY,	TJ,	TM,	TN,	TR,	TT,
		TZ,	UA,	ŪĠ,	US,	UZ,	VC,	VN,	YU,	ZA,	ZM,	zw				•
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		ΙE,	IS,	IT,	LT,	LU,	LV,	MC,	NL,	${ m PL}$,	PT,	RO,	SE,	SI,	SK,	TR,
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PRIORITY	APP	LN.	INFO	. :					ı	JP 2	004-	3300′	79		A 2	0041115
										~- ^	004	2200			3 ^	0041115
									'	JP 2	004-	3300	80		A 2	0041115
										JP 2	005-	1621	63		A 2	0050602
									1	JP 2	005-	2097	74		A 2	0050720

OTHER SOURCE(S):

MARPAT 144:488643

GΙ

$$R^{3}n$$
 $R^{2}m$
 $R^{2}m$
 $R^{3}n$
 R^{4}
 $R^{2}m$
 R^{5}
 R^{5}
 R^{5}
 R^{7}
 R^{7}

An imine compound represented by the formula I [wherein A = heterocyclic group; R1-R3 = independently H, halo, (un)substituted alkyl, etc.; R4 = (un)substituted (halo)alkyl, alkenyl, aryl, etc.; R5 = H, alkoxy, haloalkyl, (un)substituted (hetero)cyclyl, etc.; W = -C0-, -C0-C0-, -C0-NH-, -CS-NH-, or -S02-; m = 0 or 1; n = 0 or 1; and pharmaceutically acceptable salts thereof] were prepared as cannabinoid (CB) receptor agonists. For example, II was provided in a multi-step synthesis starting from 2-aminopyridine. I were tested for inhibition of human CB1 and CB2 receptor binding, and binding activity with GTP γ S mediated by human CB1, and analgesic activity. Thus, the title imine compds. have agonistic activity against a cannabinoid receptor and are useful as a therapeutic or preventive agent for pains and autoimmune diseases.

887300-40-5P

IT

CN

(preparation of pyridine, thiazole and other heteroaryl imine compds. as cannabinoid receptor agonist)

RN 887300-40-5 HCAPLUS

4-Cinnolinecarboxamide, N-[3-(cyclopropylmethyl)-5-(1,1-dimethylethyl)-4-methyl-2(3H)-thiazolylidene]-3-phenyl- (9CI) (CA INDEX NAME)

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28-7 (Heterocyclic Compounds (More Than One Hetero Atom))
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   cannabinoid receptor agonist)
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(preparation of pyridine, thiazole and other heteroaryl imine compds. as cannabinoid receptor agonist)

REFERENCE COUNT:

THERE ARE 183 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L63 ANSWER 3 OF 13 HCAPLUS COPYRIGHT 2006 ACS on STN ACCESSION NUMBER: 2006:318931 HCAPLUS Full-text

183

DOCUMENT NUMBER:

144:369918

TITLE:

Preparation of pyridine derivatives as MCH

receptor antagonists

INVENTOR(S):

Sekiguchi, Yoshinori; Kanuma, Kosuke; Omodera, Katsunori; Sato, Kumi; Hayashi, Masato; Yamamoto,

Shuji

PATENT ASSIGNEE(S):

Taisho Pharmaceutical Co., Ltd., Japan; Arena

Pharmaceuticals, Inc.

SOURCE:

PCT Int. Appl., 157 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PAT	PATENT NO.)]	DATE		APPLICATION NO.				DATE				
						-							- -				
WO	2006	03590	67		A1 20060406			WO 2005-JP18237						20050927			
	W:	ΑE,	AG,	AL,	AM,	AT,	AU,	ΑZ,	BA,	BB,	BG,	BR,	BW,	BY,	BZ,	CA,	
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•		ΙE,	IS,	IT,	LT,	ĻŪ,	LV,	MC,	NL,	PL,	PT,	RO,	SE,	SI,	SK,	TR,	
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		ZW,	AM,	ΑZ,	BY,	KG,	KZ,	${ m MD}$,	RU,	TJ,	TM		·				
PRIORITY	APP	LN.	INFO	.:				•	1	US 2	004-	6143	58P		P 2	0040930	

OTHER SOURCE(S):

MARPAT 144:369918

GΙ

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Title compds. represented by the formula I [wherein R1 = (un)substituted alkyl, alkenyl, carboxyl, etc.; R2, R3 = independently H or alkyl; A, B = independently a single bond, CH2 or (CH2)2; Z1-Z4 = independently H, halo, CN, carbamoyl, etc.; Y = SO2, CO, CO2, etc.; m = 0 or 1; and pharmaceutically acceptable salts, hydrates or solvates thereof] were prepared as MCH receptor antagonists. For example, II was provided in a multi-step synthesis starting

from 2-chloro-5- methylpyridine. II showed antagonist activity of MCH receptor with IC50 value of 1.0 nM. Thus, I and their pharmaceutical compns. are useful as MCH receptor antagonists in the prophylaxis or treatment of improving memory function, sleeping and arousal, anxiety, depression, mood disorders, seizure, obesity, diabetes, appetite and eating disorders, cardiovascular disease, hypertension, dyslipidemia, myocardial infarction, binge eating disorders including bulimia, anorexia, mental disorders including manic depression, schizophrenia, delirium, dementia, stress, cognitive disorders, attention deficit disorder, substance abuse disorders and dyskinesia including Parkinson's disease, epilepsy, and addiction (no data). 881892-75-7P, N-[cis-4-[[4-(Dimethylamino)-6-methylpyridin-2yl]amino]cyclohexyl]-3-phenylcinnoline-4-carboxamide (preparation of pyridine derivs. as MCH receptor antagonists) 881892-75-7 HCAPLUS 4-Cinnolinecarboxamide, N-[cis-4-[[4-(dimethylamino)-6-methyl-2pyridinyl]amino]cyclohexyl]-3-phenyl- (9CI) (CA INDEX NAME)

Relative stereochemistry.

IT

RN

CN

27-16 (Heterocyclic Compounds (One Hetero Atom)) CC Section cross-reference(s): 1, 63 881890-92-2P, 3-Chloro-4-fluoro-N-[cis-4-[(pyridin-2-IT 881890-93-3P, yl)amino]cyclohexyl]benzamide hydrochloride 3-Chloro-4-fluoro-N-[cis-4-[(5-methylpyridin-2yl)amino]cyclohexyl]benzamide hydrochloride 881890-94-4P, 3-Chloro-4-fluoro-N-[cis-4-[(6-methylpyridin-2yl)amino]cyclohexyl]benzamide hydrochloride 881890-95-5P, 3-Chloro-N-[cis-4-[[4-(dimethylamino)-5-methylpyridin-2yl]amino]cyclohexyl]-4-fluorobenzamide hydrochloride N-[cis-4-[[4-(Dimethylamino)-5-methylpyridin-2-yl]amino]cyclohexyl]-3,4,5-trifluorobenzamide hydrochloride 881891-00-5P, 3-Chloro-N-[cis-4-[[4-(dimethylamino)-5-methylpyridin-2-881891-01-6P, yl]amino]cyclohexyl]-5-fluorobenzamide hydrochloride 3,5-Dichloro-N-[cis-4-[[4-(dimethylamino)-5-methylpyridin-2yl]amino]cyclohexyl]benzamide hydrochloride 881891-02-7P, N-[cis-4-[[4-(Dimethylamino)-5-methylpyridin-2-yl]amino]cyclohexyl]-3,4-difluorobenzamide hydrochloride 881891-03-8P, 3,4-Dichloro-N-[cis-4-[[4-(Dimethylamino)-5-methylpyridin-2yl]amino]cyclohexyl]benzamide hydrochloride 881891-04-9P, 3-Chloro-N-[cis-4-[[4-(dimethylamino)-5-methylpyridin-2yl]amino]cyclohexyl]benzamide hydrochloride 5-Bromo-N-[cis-4-[[4-(dimethylamino)-5-methylpyridin-2yl]amino]cyclohexyl]nicotinamide dihydrochloride 881891-06-1P, N-[cis-4-[[4-(Dimethylamino)-5-methylpyridin-2-yl]amino]cyclohexyl]-3-(trifluoromethoxy) benzamide hydrochloride 881891-07-2P, N-[cis-4-[[4-(Dimethylamino)-5-methylpyridin-2-yl]amino]cyclohexyl]-4fluoro-3-(trifluoromethyl)benzamide hydrochloride 881891-08-3P,

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N-[cis-4-[[4-(Dimethylamino)-5-methylpyridin-2-yl]amino]cyclohexyl]-3-
(trifluoromethyl)benzamide hydrochloride 881891-09-4P,
3-Chloro-4-fluoro-N-[cis-4-[[5-methyl-4-(methylamino)pyridin-2-
yl]amino]cyclohexyl]benzamide hydrochloride 881891-12-9P,
3,4,5-Trifluoro-N-[cis-4-[[5-methyl-4-(methylamino)pyridin-2-
yl]amino]cyclohexyl]benzamide hydrochloride 881891-15-2P,
N-[cis-4-[(4-Amino-5-methylpyridin-2-yl)amino]cyclohexyl]-3-chloro-4-
                              881891-16-3P, N-[cis-4-[(4-Amino-5-
fluorobenzamide hydrochloride
methylpyridin-2-yl)amino]cyclohexyl]-3,4,5-trifluorobenzamide
               881891-17-4P, 3-Chloro-N-[cis-4-[[4-
hydrochloride
[ethyl(methyl)amino]-5-methylpyridin-2-yl]amino]cyclohexyl]-4-
                               881891-20-9P, 3-Chloro-4-fluoro-N-[cis-
fluorobenzamide hydrochloride
4-[[5-methyl-4-(pyrrolidin-1-yl)pyridin-2-
yl]amino]cyclohexyl]benzamide hydrochloride
                                             881891-22-1P,
3-Chloro-4-fluoro-N-[cis-4-[[5-methyl-4-(morpholin-4-yl)pyridin-2-
yl]amino]cyclohexyl]benzamide hydrochloride 881891-25-4P,
3-Chloro-4-fluoro-N-[cis-4-[[4-(1H-imidazol-1-yl)-5-methylpyridin-2-
yl]amino]cyclohexyl]benzamide dihydrochloride 881891-27-6P,
N-[cis-4-[(3-Chloro-4-fluorobenzyl)amino]cyclohexyl]-N',N'-dimethyl-5-
methylpyridine-2,4-diamine dihydrochloride
                                            881891-28-7P,
3-Chloro-N-[cis-4-[[4-(dimethylamino)-5-methylpyridin-2-
yl]amino]cyclohexyl]-4-fluorobenzenesulfonamide hydrochloride
881891-29-8P, 1-(3-Chloro-4-fluorophenyl)-3-[cis-4-[[4-(dimethylamino)-
5-methylpyridin-2-yl]amino]cyclohexyl]urea hydrochloride
881891-30-1P, 1-(3-Chloro-4-fluorophenyl)-3-[cis-4-[[4-(dimethylamino)-
5-methylpyridin-2-yl]amino]cyclohexyl]thiourea hydrochloride
881891-31-2P, 4-Bromophenyl [cis-4-[[4-(dimethylamino)-5-methylpyridin-
(dimethylamino) -6-methylpyridin-2-yl]amino]cyclohexyl]-4-
fluorobenzamide hydrochloride 881891-36-7P, N-[cis-4-[[4-
(Dimethylamino)-6-methylpyridin-2-yl]amino]cyclohexyl]-3,4,5-
trifluorobenzamide hydrochloride 881891-37-8P, 3-Chloro-N-[cis-4-[(6-
chloropyridin-2-yl)amino]cyclohexyl]-4-fluorobenzamide hydrochloride
881891-38-9P, 3-Chloro-N-[cis-4-[[[4-(dimethylamino)-5-methylpyridin-2-
yl]amino]methyl]cyclohexyl]-4-fluorobenzamide hydrochloride
881891-44-7P, 3-Chloro-N-[[cis-4-[[4-(dimethylamino)-5-methylpyridin-2-
yl]amino]cyclohexyl]methyl]-4-fluorobenzamide hydrochloride
881891-48-1P, 3-Chloro-4-fluoro-N-[cis-4-[(4-methyl-6,7-dihydro-5H-
cyclopenta[b]pyridin-2-yl)amino]cyclohexyl]benzamide hydrochloride
881891-49-2P, 3-Chloro-4-fluoro-N-[cis-4-[(4-methyl-5,6,7,8-
tetrahydroquinolin-2-yl)amino]cyclohexyl]benzamide hydrochloride
881891-50-5P, 3-Chloro-4-fluoro-N-[cis-4-[(4-methylpyridin-2-
yl)amino]cyclohexyl]benzamide hydrochloride
                                             881891-51-6P,
3-Chloro-N-[cis-4-[[4-(dimethylamino)pyridin-2-yl]amino]cyclohexyl]-4-
fluorobenzamide hydrochloride
                               881891-56-1P, N-[cis-4-[[4-
(Dimethylamino)pyridin-2-yl]amino]cyclohexyl]-3,4,5-trifluorobenzamide
               881891-57-2P, 3-Chloro-N-[cis-4-[[6-
hydrochloride
(dimethylamino)pyridin-2-yl]amino]cyclohexyl]-4-fluorobenzamide
               881891-61-8P, 3-Chloro-4-fluoro-N-[cis-4-[(5,6,7,8-
hydrochloride
tetrahydroquinolin-2-yl)amino]cyclohexyl]benzamide hydrochloride
881891-62-9P, 3,4,5-Trifluoro-N-[cis-4-[(5,6,7,8-tetrahydroquinolin-2-
yl)amino]cyclohexyl]benzamide hydrochloride
                                              881891-63-0P,
3-Chloro-4-fluoro-N-[cis-4-[(4-nitropyridin-2-
'yl)amino]cyclohexyl]benzamide hydrochloride
                                              881891-65-2P,
3,4,5-Trifluoro-N-[cis-4-[(4-nitropyridin-2-
yl)amino]cyclohexyl]benzamide hydrochloride
                                             881891-66-3P,
3-Chloro-N-[cis-4-[(5,6-dimethylpyridin-2-yl)amino]cyclohexyl]-4-
fluorobenzamide hydrochloride
                               881891-69-6P, 3-Chloro-4-fluoro-N-[cis-
4-[(4-methoxypyridin-2-yl)amino]cyclohexyl]benzamide hydrochloride
881891-70-9P, 3-Chloro-N-[cis-4-[(4-cyanopyridin-2-
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yl)amino]cyclohexyl]-4-fluorobenzamide hydrochloride
                                                       881891-71-0P,
2-[[cis-4-[(3-Chloro-4-fluorobenzoyl)amino]cyclohexyl]amino]isonicotin
        881891-72-1P, 2-[[cis-4-[(3-Chloro-4-
fluorobenzoyl)amino]cyclohexyl]amino]-N,N-dimethylisonicotinamide
                881891-73-2P, 3-Chloro-4-fluoro-N-[cis-4-[[4-
hydrochloride
(hydroxymethyl)pyridin-2-yl]amino]cyclohexyl]benzamide hydrochloride
881891-74-3P, 3-Chloro-4-fluoro-N-[cis-4-[[5-methyl-4-[methyl(2-
phenylethyl)amino]pyridin-2-yl]amino]cyclohexyl]benzamide
                881891-77-6P, 3-Chloro-4-fluoro-N-[cis-4-[(4,5,6-
hydrochloride
trimethylpyridin-2-yl)amino]cyclohexyl]benzamide hydrochloride
881891-78-7P, 3-Chloro-N-[cis-4-[(4,5-dimethylpyridin-2-
yl)amino]cyclohexyl]-4-fluorobenzamide hydrochloride
3-Chloro-N-[cis-4-[(4,6-dimethylpyridin-2-yl)amino]cyclohexyl]-4-
                                881891-80-1P, 3-Chloro-4-fluoro-N-[cis-
fluorobenzamide hydrochloride
4-[(3,5,6-trimethylpyridin-2-yl)amino]cyclohexyl]benzamide
               881891-81-2P, 3-Chloro-4-fluoro-N-[cis-4-[(3-fluoro-4-
hydrochloride
methylpyridin-2-yl)amino]cyclohexyl]benzamide hydrochloride
881891-84-5P, 3-Chloro-4-fluoro-N-[cis-4-[(5-fluoro-4-methylpyridin-2-
yl)amino]cyclohexyl]benzamide hydrochloride
                                             881891-96-9P,
3,4,5-Trifluoro-N-[cis-3-[(6-methylpyridin-2-
                                881892-01-9P, 2-(4-Acetylphenyloxy)-N-
yl)amino]cyclopentyl]benzamide
[cis-4-[[4-(dimethylamino)-6-methylpyridin-2-
yl]amino]cyclohexyl]acetamide
                               881892-02-0P
                                             881892-04-2P
               881892-07-5P, 2-Cyclohex-1-en-1-yl-N-[cis-4-[[4-
881892-06-4P
(dimethylamino) -6-methylpyridin-2-yl]amino]cyclohexyl]acetamide
881892-09-7P, 2-Cyclohexyl-N-[cis-4-[[4-(dimethylamino)-6-
methylpyridin-2-yl]amino]cyclohexyl]acetamide
                                                881892-11-1P,
N-[cis-4-[[4-(Dimethylamino)-6-methylpyridin-2-yl]amino]cyclohexyl]-2-
[(4-methylpyrimidin-2-yl)thio]acetamide
                                          881892-13-3P
                                                         881892-14-4P
881892-15-5P, N-[cis-4-[[4-(Dimethylamino)-6-methylpyridin-2-
yl]amino]cyclohexyl]-2,5-dimethyl-1-[(2-thienyl)methyl]-1H-pyrrole-3-
carboxamide 881892-17-7P, N-[cis-4-[[4-(Dimethylamino)-6-
methylpyridin-2-yl]amino]cyclohexyl]-2-(4-oxo-3,4-dihydrophthalazin-1-
              881892-19-9P
                             881892-20-2P, N-[2-[[cis-4-[[4-
yl)acetamide
(Dimethylamino) -6-methylpyridin-2-yl]amino]cyclohexyl]amino]-2-
                              881892-22-4P, N-[cis-4-[[4-
oxoethyl]-2-furancarboxamide
(Dimethylamino) -6-methylpyridin-2-yl]amino]cyclohexyl]-5-iodo-2-
                                  881892-26-8P, N-[cis-4-[[4-
                  881892-24-6P
furancarboxamide
(Dimethylamino) -6-methylpyridin-2-yl]amino]cyclohexyl]-2-(2-
                       881892-27-9P, N-[cis-4-[[4-(Dimethylamino)-6-
iodophenyl)acetamide
methylpyridin-2-yl]amino]cyclohexyl]-1H-indole-3-carboxamide
881892-29-1P, N-[cis-4-[[4-(Dimethylamino)-6-methylpyridin-2-
yl]amino]cyclohexyl]-5-(4-methylphenyl)thiophene-3-carboxamide
881892-30-4P, N-[cis-4-[[4-(Dimethylamino)-6-methylpyridin-2-
yl]amino]cyclohexyl]-2-(5-methyl-2-phenylthiazol-4-yl)acetamide
881892-31-5P
              881892-33-7P, N-[cis-4-[[4-(Dimethylamino)-6-
methylpyridin-2-yl]amino]cyclohexyl]-2-(7-methoxy-2-oxo-2H-chromen-4-
               881892-34-8P, N-[cis-4-[[4-(Dimethylamino)-6-
yl)acetamide
methylpyridin-2-yl]amino]cyclohexyl]-4-[4-(methylsulfonyl)phenyl]-4-
                881892-35-9P, N-[cis-4-[[4-(Dimethylamino)-6-
oxobutanamide
methylpyridin-2-yl]amino]cyclohexyl]-5-methoxy-1H-indole-2-carboxamide
881892-36-0P, N-(2,4-Difluorophenyl)-2-[2-[[cis-4-[[4-(dimethylamino)-...
6-methylpyridin-2-yl]amino]cyclohexyl]amino]-2-oxoethyl]benzamide
881892-37-1P, N-[cis-4-[[4-(Dimethylamino)-6-methylpyridin-2-
yl]amino]cyclohexyl]-3-[[(4-methylphenyl)sulfonyl]amino]benzamide
881892-38-2P, 2-[2-[(2,5-Dimethoxyphenyl)amino]-2-oxoethyl]-N-[cis-4-
[[4-(dimethylamino)-6-methylpyridin-2-yl]amino]cyclohexyl]benzamide
881892-39-3P, 2-[2-[[cis-4-[[4-(Dimethylamino)-6-methylpyridin-2-
yl]amino]cyclohexyl]amino]-2-oxoethyl]-N-(4-isopropylphenyl)benzamide
881892-40-6P, 2-[2-[[cis-4-[[4-(Dimethylamino)-6-methylpyridin-2-
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yl]amino]cyclohexyl]amino]-2-oxoethyl]-N-[4-
                                                         881892-41-7P,
(trifluoromethoxy) phenyl] benzamide
N-[cis-4-[[4-(Dimethylamino)-6-methylpyridin-2-yl]amino]cyclohexyl]-4-
                                            881892-42-8P
                                                                   881892-44-0P,
(4-nitrophenyl) butanamide
N-[cis-4-[[4-(Dimethylamino)-6-methylpyridin-2-yl]amino]cyclohexyl]-2-
(4-phenoxyphenyl)acetamide 881892-46-2P, N-[cis-4-[[4-
(Dimethylamino) -6-methylpyridin-2-yl]amino]cyclohexyl]-11-
phenylundecanamide
                                881892-48-4P, N-[cis-4-[[4-(Dimethylamino)-6-
methylpyridin-2-yl]amino]cyclohexyl]-2-[(pyridin-4-yl)thio]acetamide
                        881892-52-0P, N-[cis-4-[[4-(Dimethylamino)-6-
881892-50-8P
methylpyridin-2-yl]amino]cyclohexyl]-2-(4-fluorobenzoyl)benzamide
881892-54-2P, N-[cis-4-[[4-(Dimethylamino)-6-methylpyridin-2-
yl]amino]cyclohexyl]-2-(2-phenylethyl)benzamide
                                                                                 881892-55-3P,
N-[cis-4-[[4-(Dimethylamino)-6-methylpyridin-2-yl]amino]cyclohexyl]-2-
                                                         881892-56-4P, 2-['(2-
(ethylthio) -2,2-diphenylacetamide
Cyanophenyl)thio]-N-[cis-4-[[4-(dimethylamino)-6-methylpyridin-2-
                                                 881892-57-5P, N-[cis-4-[[4-
yl]amino]cyclohexyl]benzamide
(Dimethylamino) -6-methylpyridin-2-yl]amino]cyclohexyl]-4'-
(trifluoromethyl)biphenyl-2-carboxamide
                                                                  881892-58-6P,
N-[cis-4-[[4-(Dimethylamino)-6-methylpyridin-2-yl]amino]cyclohexyl]-7-
                                                       881892-59-7P
                                                                               881892-60-0P
nitro-9H-fluorene-4-carboxamide
                                                881892-63-3P
                                                                        881892-64-4P,
881892-61-1P
                        881892-62-2P
N-[cis-4-[[4-(Dimethylamino)-6-methylpyridin-2-yl]amino]cyclohexyl]-2-
[4-(trifluoromethoxy)phenyl]acetamide 881892-65-5P
                                                                                         881892-67-7P,
N-[cis-4-[[4-(Dimethylamino)-6-methylpyridin-2-yl]amino]cyclohexyl]-5-
                                        881892-68-8P 881892-69-9P.
(2-thienyl)pentanamide
2-[5-(Benzyloxy)-1H-indol-3-yl]-N-[cis-4-[[4-(dimethylamino)-6-
methylpyridin-2-yl]amino]cyclohexyl]acetamide 881892-70-2P,
N-[\text{cis-4-}[\text{4-(Dimethylamino)-6-methylpyridin-2-yl}] a \text{mino}] \ \text{cyclohexyl}] - N'-[\text{cis-4-}[\text{4-(Dimethylamino)-6-methylpyridin-2-yl}] a \text{mino}] \ \text{cyclohexyl}] - N'-[\text{cis-4-[\text{4-(Dimethylamino)-6-methylpyridin-2-yl}] a \text{mino}]} \ \text{cyclohexyl}] - N'-[\text{cis-4-[\text{4-(Dimethylamino)-6-methylpyridin-2-yl}]} \ \text{cyclohexyl}] - N'-[\text{cis-4-[\text{4-(Dimethylamino)-6-methylpyridin-2-yl}] a \text{mino}]} \ \text{cyclohexyl}] - N'-[\text{cis-4-[\text{4-(Dimethylamino)-6-methylpyridin-2-yl}]} \ \text{cyclohexyl}] - N'-[\text{cis-4-[\text{4-(Dimethylamino)-6-methylpyridin-2-yl}]} \ \text{cyclohexyl}] - N'-[\text{cis-4-[\text{4-(Dimethylamino)-6-methylpyridin-2-yl}]} \ \text{cyclohexyl}] - N'-[\text{cis-4-[\text{4-(Dimethylamino)-6-methylpyridin-2-yl]}]} \ \text{cyclohexyl}] - N'-[\text{cis-4-[\text{4-(Dimethylamino)-6-methylpyridin-2-yl}]} \ \text{cyclohexyl}] - N'-[\text{cis-4-[\text{4-(Dimethylamino)-6-methylpyridin-2-yl]}]} \ \text{cyclohexyl}] - N'-[\text{cis-4-[\text{4-(Dimethylamino)-6-methylpyridin-2-yl}]} \ \text{cyclohexyl}] - N'-[\text{cis-4-[\text{4-(Dimethylamino)-6-methylpyridin-2-yl]}]} \ \text{cyclohexyl}] - N'-[\text{cis-4-[\text{4-(Dimethylamino)-6-methylpyridin-2-yl]}]} \ \text{cyclohexyl}] - N'-[\text{cis-4-[\text{4-(Dimethylamino)-6-methylpyridin-2-yl]}] - N'-[
(3-methylphenyl)phthalamide 881892-71-3P, N-[cis-4-[[4-
(Dimethylamino) -6-methylpyridin-2-yl]amino]cyclohexyl]-3-methyl-4-oxo-
2-phenyl-4H-chromene-8-carboxamide 881892-72-4P 881892-73-5P,
2-[3,5-Bis(trifluoromethyl)benzoyl]-N-[cis-4-[[4-(dimethylamino)-6-
methylpyridin-2-yl]amino]cyclohexyl]benzamide
                                                                            881892-74-6P,
N-[cis-4-[[4-(Dimethylamino)-6-methylpyridin-2-yl]amino]cyclohexyl]-2-
[(3-methylbenzo[b]thien-2-yl)carbonyl]benzamide 881892-75-7P
, N-[cis-4-[[4-(Dimethylamino)-6-methylpyridin-2-yl]amino]cyclohexyl]-
3-phenylcinnoline-4-carboxamide
                                                       881892-76-8P, N-[cis-4-[[4-
 (Dimethylamino)-6-methylpyridin-2-yl]amino]cyclohexyl]-9-oxo-9H-
fluorene-2-carboxamide 881892-77-9P, N-[cis-4-[[4-(Dimethylamino)-6-
methylpyridin-2-yl]amino]cyclohexyl]biphenyl-2-carboxamide
881892-78-0P, N-[cis-4-[[4-(Dimethylamino)-6-methylpyridin-2-
                                                                  881892-79-1P,
yl]amino]cyclohexyl]-4-phenoxybenzamide
N-[cis-4-[[4-(Dimethylamino)-6-methylpyridin-2-yl]amino]cyclohexyl]-9H-
xanthene-9-carboxamide 881892-80-4P 881892-81-5P,
4-(Benzyloxy)-N-[cis-4-[[4-(dimethylamino)-6-methylpyridin-2-
yl]amino]cyclohexyl]benzamide
                                                    881892-82-6P, N-[cis-4-[[4-
 (Dimethylamino) -6-methylpyridin-2-yl]amino]cyclohexyl] -2-(4-
                                         881892-83-7P, N-[cis-4-[[4-(Dimethylamino)-6-
methylbenzovl)benzamide
methylpyridin-2-yl]amino]cyclohexyl]-2-(phenoxymethyl)benzamide
881892-84-8P, N-[cis-4-[[4-(Dimethylamino)-6-methylpyridin-2-
yl]amino]cyclohexyl]-N'-(1-naphthyl)phthalamide
                                                                                 881892-85-9P,
N-[cis-4-[[4-(Dimethylamino)-6-methylpyridin-2-
yl]amino]cyclohexyl]anthracene-2-carboxamide
                                                                           881892-86-0P,
N-[cis-4-[[4-(Dimethylamino)-6-methylpyridin-2-yl]amino]cyclohexyl]-4'-
heptylbiphenyl-4-carboxamide 881892-87-1P, 2-[4-(4-Chlorophenyl)-2-
phenylthiazol-5-yl]-N-[cis-4-[[4-(dimethylamino)-6-methylpyridin-2-
yl]amino]cyclohexyl]acetamide
                                                   881892-88-2P, 2-(Benzylthio)-N-[cis-4-
 [[4-(dimethylamino)-6-methylpyridin-2-yl]amino]cyclohexyl]acetamide
 881892-89-3P, N-[cis-4-[[4-(Dimethylamino)-6-methylpyridin-2-
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yl]amino]cyclohexyl]-4-phenylbutanamide
                                          881892-91-7P,
2-(Benzo[b]thien-3-y1)-N-[cis-4-[[4-(dimethylamino)-6-methylpyridin-2-
                              881892-92-8P, 2-(2,3-Dihydro-1H-inden-
yl]amino]cyclohexyl]acetamide
2-yl)-N-[cis-4-[[4-(dimethylamino)-6-methylpyridin-2-
yl]amino]cyclohexyl]acetamide 881892-93-9P, 4-(3,4-Dimethoxyphenyl)-
N-[cis-4-[[4-(dimethylamino)-6-methylpyridin-2-
                                881892-94-0P, 4-(2,3-Dihydro-1,4-
yl]amino]cyclohexyl]butanamide
benzodioxin-6-yl)-N-[cis-4-[[4-(dimethylamino)-6-methylpyridin-2-
                               881892-95-1P, N-[cis-4-[[4-
yl]amino]cyclohexyl]butanamide
(Dimethylamino) -6-methylpyridin-2-yl]amino]cyclohexyl]-1-[(4-
methylphenyl)sulfonyl]-1H-pyrrole-3-carboxamide
                                                  881892-96-2P;
N-[cis-4-[[4-(Dimethylamino)-6-methylpyridin-2-yl]amino]cyclohexyl]-4-
                            881892-97-3P, 5-Acetyl-N-[cis-4-[[4-
(methylsulfonyl)benzamide
(dimethylamino) -6-methylpyridin-2-yl]amino]cyclohexyl]thiophene-2-
              881892-98-4P, 3-Chloro-N-[cis-4-[[4-(dimethylamino)-6-
carboxamide
methylpyridin-2-yl]amino]cyclohexyl]-4-(isopropylsulfonyl)-5-
(methylthio)thiophene-2-carboxamide
                                     881892-99-5P,
N-[cis-4-[[4-(Dimethylamino)-6-methylpyridin-2-yl]amino]cyclohexyl]-5-
(methylsulfonyl)thiophene-2-carboxamide
                                         881893-00-1P,
N-[cis-4-[[4-(Dimethylamino)-6-methylpyridin-2-yl]amino]cyclohexyl]-4-
                            881893-01-2P, N-[cis-4-[[4-
(1,3-oxazol-5-yl)benzamide
(Dimethylamino) -6-methylpyridin-2-yl]amino]cyclohexyl]-1-
(phenylsulfonyl)-1H-indole-3-carboxamide
                                           881893-02-3P,
N-[cis-4-[[4-(Dimethylamino)-6-methylpyridin-2-yl]amino]cyclohexyl]-4-
nitropyridine-2-carboxamide
                              881893-03-4P, N-[cis-4-[[4-
(Dimethylamino) -6-methylpyridin-2-yl]amino]cyclohexyl]-2-oxo-2-
                  881893-04-5P, N-[cis-4-[[4-(Dimethylamino)-6-
phenylacetamide
methylpyridin-2-yl]amino]cyclohexyl]-2-mesityl-2-(oxo)acetamide
                              881893-07-8P, N-[cis-4-[[4-
               881893-06-7P
881893-05-6P
(Dimethylamino)-6-methylpyridin-2-yl]amino]cyclohexyl]-2-(9H-fluoren-9-
                    881893-08-9P, N-[cis-4-[[4-(Dimethylamino)-6-
ylidene)acetamide
methylpyridin-2-yl]amino]cyclohexyl]-2,1,3-benzoxadiazole-5-
              881893-09-0P, 2-(4-Chlorophenoxy)-N-[cis-4-[[4-
carboxamide
(dimethylamino)-6-methylpyridin-2-yl]amino]cyclohexyl]acetamide
881893-10-3P, Methyl 4-[[[cis-4-[[4-(dimethylamino)-6-methylpyridin-2-
yl]amino]cyclohexyl]amino]carbonyl]benzoate
                                              881893-11-4P,
N-[cis-4-[[4-(Dimethylamino)-6-methylpyridin-2-yl]amino]cyclohexyl]-2-
                   881893-12-5P, N-[cis-4-[[4-(Dimethylamino)-6-
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methylpyridin-2-yl]amino]cyclohexyl]acetamide
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881893-72-7P, N-[cis-4-[[2-(4-Chlorophenoxy)ethyl]amino]cyclohexyl]-
N', N'-dimethyl-6-methylpyridine-2, 4-diamine 881893-73-8P, Methyl
4-[[[cis-4-[[4-(dimethylamino)-6-methylpyridin-2-
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881893-98-7P, N',N'-Dimethyl-6-methyl-N-[cis-4-[[2-
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N-[cis-4-[(3-Chloro-4-fluorobenzyl)amino]cyclohexyl]-N',N'-dimethyl-6-methylpyridine-2,4-diamine 881894-02-6P, N-[cis-4-[[2-(2-Bromophenyl)ethyl]amino]cyclohexyl]-N',N'-dimethyl-6-methylpyridine-2,4-diamine 881894-03-7P, N-[cis-4-[(Cyclohexylmethyl)amino]cyclohexyl]-N',N'-dimethyl-6-methylpyridine-2,4-diamine 881894-04-8P, N-[cis-4-[(2-Cyclopentylethyl)amino]cyclohexyl]-N',N'-dimethyl-6-methylpyridine-2,4-diamine 881894-05-9P, N-[cis-4-[(4-Chlorobenzyl)amino]cyclohexyl]-N',N'-dimethyl-6-methylpyridine-2,4-diamine

(preparation of pyridine derivs. as MCH receptor antagonists)

REFERENCE COUNT: 11 THERE ARE 11 CITED REFERENCES AVAILABLE FOR

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RE FORMAT

L63 ANSWER 4 OF 13 HCAPLUS COPYRIGHT 2006 ACS on STN ACCESSION NUMBER: 2005:14357 HCAPLUS Full-text

DOCUMENT NUMBER:

142:114079

TITLE:

Preparation of heterocyclic compounds containing

2-substituted cycloalkanecarboxylic acid

derivative moiety as cysteine protease inhibitors

Hiratate, Akira; Tatsuzuki, Makoto; Busujima,

Tsuyoshi

PATENT ASSIGNEE(S):

Taisho Pharmaceutical Co., Ltd., Japan

SOURCE:

INVENTOR(S):

PCT Int. Appl., 120 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent Japanese

LANGUAGE:

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

	PATENT	NO.			KIND DATE			APPLICATION NO.						DATE		
	WO 200	 50007	 93		A1 20050106			1	WO 2	004-	JP93	50		20040625		
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PRIO	RITY AP	PLN.	INFO	.:						JP 2	003-	1827	27	j	A. 2	0030626
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OTHER SOURCE(S): MARPAT 142:114079

GΙ

Title compds. I [R1 = aryl, etc.; R2, R3 = H, (un)substituted alkyl, etc.; R4 AB = H, halo, etc.; n = 2-12; X = carbonyl, etc.; Z = H, CO2R6, etc.; R6 = H, (un) substituted alkyl; cycA = cycloalkyl, cycloalkenyl] were prepared For example, EDCI-mediated acylation of (2S)-2-amino-3-phenylpropan-1-ol with (1R, 2S)-2-[(4- chlorobenzoyl)amino]cyclohexanecarboxylic acid followed by oxidation with IBX afforded (1R,2S)-N-[(1S)-1-benzyl-2-oxoethyl]-2-[(4chlorobenzoyl)amino]cyclohexanecarboxamide (II). In cathepsin B inhibition assays, the IC50 value of compound II was 0.68 nM. Compds. I are claimed useful as cysteine protease inhibitors for the treatment of cerebral infarction, Alzheimer's disease, etc.

IT 820990-60-1P

> (preparation of heterocyclic compds. containing 2-substituted cycloalkanecarboxylic acid derivative moiety as cysteine protease inhibitors for treatment of cerebral infarction, Alzheimer's disease, etc.)

820990-60-1 HCAPLUS RN

4-Cinnolinecarboxamide, N-[(1S,2R)-2-[[[(1S)-1-formyl-2-CN phenylethyl]amino]carbonyl]cyclohexyl]-3-phenyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

820989-20-6P

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IC
     ICM C07C233-63
     ICS C07C237-22; C07C237-24; A61K031-16; A61P043-00
     28-15 (Heterocyclic Compounds (More Than One Hetero Atom))
CC
     Section cross-reference(s): 1, 24, 25, 27
     138674-34-7P, Cysteine protease inhibitor
                                                  820988-94-1P
IT
                                    820988-97-4P
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   (preparation of heterocyclic compds. containing 2-substituted
   cycloalkanecarboxylic acid derivative moiety as cysteine protease
   inhibitors for treatment of cerebral infarction, Alzheimer's
   disease, etc.)
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(preparation of heterocyclic compds. containing 2-substituted cycloalkanecarboxylic acid derivative moiety as cysteine protease inhibitors for treatment of cerebral infarction, Alzheimer's disease, etc.)

REFERENCE COUNT:

THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

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L63 ANSWER 5 OF 13 HCAPLUS COPYRIGHT 2006 ACS ON STN ACCESSION NUMBER: 2004:963181 HCAPLUS Full-text
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5

DOCUMENT NUMBER:

INVENTOR(S):

141:379941

TITLE:

Preparation of quinazoline-2,4-diamines as melanin concentrating hormone (MCH) receptor antagonists Sekiguchi, Yoshikatsu; Kanuma, Yukihiro; Omodera,

Katsunori; Tran, Thuy-ahn; Kramer, Bryan Aubrey; Beeley, Nigel Robert Arnold

PATENT ASSIGNEE(S): Taisho Pharmaceutical Co., Ltd., Japan

SOURCE:

Jpn. Kokai Tokkyo Koho, 988 pp.

CODEN: JKXXAF

DOCUMENT TYPE:

Patent Japanese

LANGUAGE:

Japane

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2004315511	A2	20041111	JP 2004-95046	20040329
PRIORITY APPLN. INFO.:			JP 2003-93418 A	20030331

OTHER SOURCE(S):

MARPAT 141:379941

GΙ

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AΒ The title compds. Q-L-Y-R1 [Q = Q1, H2NC(:NH); wherein R2 = NHNH2, NHNHBoc, (un) substituted NH2, morpholino, 4-acetyl-piperazinyl, 4-phenylpiperazinyl; R1 = each (un) substituted C1-16 alkyl, C2-8 alkenyl, C2-4 alkynyl, C3-6 cycloalkyl, C3-6 cycloalkenyl, carbocyclyl, carbocyclic alkyl, or heterocyclyl; L = each Q2-Q6 or its cis- or trans-isomer, Q7-Q16; R4 = H, C1-3 alkyl; R5 = H, each (un) substituted carbocyclic aryl or C1-3 alkyl; Y = S02, CO, a single bond, CH2] or salts thereof are prepared These compds. are MCH receptor antagonists and used for regulating orphan G protein-coupled receptor SLC-1 and for the prevention and/or treatment of obesity, obesity-related diseases, anxiety, or depression. Thus, hydrogenolysis of benzyl cis-[[4-(4dimethylaminoquinazolin-2- ylamino)cyclohexyl]methyl]carbamate over 5% Pd-C in MeOH at 50° under H atmospheric for 3 days gave a solution of cis-[[4-(4dimethylaminoquinazolin-2-ylamino)cyclohexyl]methyl]amine in MeOH which underwent reductive alkylation with 4-bromo-2- trifluoromethoxybenzaldehyde and NaBH(OAc)3 in AcOH/CH2Cl2 to give, after purification using HPLC and treatment with 4 N HCl/EtOAc, compound (I).2HCl. In a high throughput function screen for identifying lead compds., I.2HCl inhibited the human MCHinduced cellular Ca2+ flux with IC50 of 6 µg/mL.

IC ICM C07D239-95

ICS A61K031-517; A61K031-5377; A61P003-04; A61P025-22; A61P025-24; C07D401-12; C07D401-14; C07D403-12; C07D405-12; C07D409-12; C07D409-14; C07D413-12; C07D413-14; C07D417-12; C07D417-14

CC 28-16 (Heterocyclic Compounds (More Than One Hetero Atom)) Section cross-reference(s): 1, 2

L63 ANSWER 6 OF 13 HCAPLUS COPYRIGHT 2006 ACS on STN ACCESSION NUMBER: 2003:282325 HCAPLUS Full-text

DOCUMENT NUMBER: 13

138:321285

TITLE:

Preparation of quinazoline-2,4-diamines as MCH

receptor antagonists

INVENTOR(S):

Sekiguchi, Yoshinori; Kanuma, Kosuke; Omodera, Katsunori; Tran, Thuy-anh; Kramer, Bryan Aubrey;

Beeley, Nigel Robert Arnold

PATENT ASSIGNEE(S):

Taisho Pharmaceutical Co., Ltd., Japan

SOURCE: PCT Int. Appl., 1171 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent English

LANGUAGE: FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO	KIND	DATE	APPLICATION NO.	DATE		
WO 2003028641	A2	20030410	WO 2002-US31059	20020930		
WO 2003028641	A 3	20030828				

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH,

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PRIORITY APPLN. INFO.:
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                                            WO 2002-US31059
                                                                   20020930
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OTHER SOURCE(S):

MARPAT 138:321285

GI

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

The title compds. QLYR1[Q = I, C(:NH)NH2; R1 = (un)substituted alkyl, alkenyl, cycloalkyl, etc.; L = II-IV (wherein R4 = H, alkyl; R5 = H, alkyl, alkyl substituted by a substituted carbocyclic aryl), etc.; Y = SO2, CO, (CH2)m; m = 0-1] which act as MCH receptor antagonists, and are useful for prophylaxis or treatment of obesity, obesity related disorders, anxiety, or depression, were prepared Thus, hydrogenation of benzyl cis-[4-(4-dimethylaminoquinazolin-2-ylamino)cyclohexylmethyl]carbamate followed by reacting the resulting intermediate with 4-bromo-2-trifluoromethoxybenzaldehyde in the presence of NaBH(OAc)3 and AcOH in CH2Cl2, and treatment of the product with 4N HCl in EtOAc afforded 34% cis-V.2HCl which showed IC50 of 6 nM against MCH receptor.

IC ICM A61K

INVENTOR(S):

CC 28-16 (Heterocyclic Compounds (More Than One Hetero Atom)) Section cross-reference(s): 1, 2

L63 ANSWER 7 OF 13 HCAPLUS COPYRIGHT 2006 ACS on STN ACCESSION NUMBER: 1999:613942 HCAPLUS Full-text

DOCUMENT NUMBER: 131:243593

TITLE: Preparation of peptides as inhibitors of caspases

Wannamaker, Marion W.; Bemis, Guy W.; Charifson, Paul S.; Lauffer, David J.; Mullican, Michael D.; Murcko, Mark A.; Wilson, Keith P.; Janetka, James W.; Davies, Robert J.; Grillot, Anne-Laure; Shi,

Zhan; Forster, Cornelia J.

PATENT ASSIGNEE(S): Vertex Pharmaceuticals Incorporated, USA

SOURCE: PCT Int. Appl., 297 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

	TENT NO.	KIND .	DATE	APPLICATION NO.	DATE
	9947545	A2		WO 1999-US5919	19990319
	W: AE, AL, A CZ, DE, E IN, IS, J MD, MG, M SI, SK, S RW: GH, GM, K DK, ES, F CF, CG, C	OK, EE, ES P, KE, KG IK, MN, MW L, TJ, TM E, LS, MW FI, FR, GB CI, CM, GA	, AZ, BA, , FI, GB, , KP, KR, , MX, NO, , TR, TT, , SD, SL, , GR, IE, , GN, GW,		ID, IL, LU, LV, SE, SG, ZA, ZW CY, DE, BF, BJ,
AU	9930986	Å1	19991011		19990319
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EP	1064298	A2	20010103	EP 1999-912662	19990319
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TW	243828	В1	20051121	< TW 1999-88104386	19990319
RU	2274642	C2	20060420		19990319
ZA	2000004652	A	20020205	· ·	20000905
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US	6531474	B1	20030311		20000919
BG	104863	A	20010430		20001016
ψS	2003232986	. A1	20031218	US 2002-314103	20021206
AU	2003255217	A1	20031113	AU 2003-255217 <	20031022
JF	2006206600	A2	20060810	<	20060317
PRIORIT	Y APPLN. INFO.	:		US 1998-78770P	
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				JP 2000-536738 < WO 1999-US5919	
		•	•	WO 1999-055919	11 17770313

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MARPAT 131:243593

Peptides R1NR2XCONR4CR52CONHY [Y = CH(CHO)CH2(CH2)mCOR7, (m = 0 or 1 and R7 = OH or ester, NHOH) or cyclic lactol derivative when R7 is OH; X = CR32 or NR3 (R3 = H, an amino acid side chain, alkyl, cycloalkyl, aryl, etc.); R1 = H, R8, COR8, COCOR8, SO2R8, SOR8, CO2R8, CONHR8, SONHR8, SONHR8, COCONHR8, COCH:CHR8, etc. (R8 = alkyl, cycloalkyl, aryl, etc.); R2 = H or R2 and R3 may form a ring; R4 = H and R5 = H, amino acid side chain, R8, etc. or R4 and R5 may form a ring] were prepared as inhibitors of caspases. Thus, p-AcNHC6H4CO-L-Val-L-Pro- NHCH(CHO)CH2CO2H-(S) was prepared by the solid-phase method and showed ki < 10 nm for inhibition of interleukin-1β converting enzyme (ICE, caspase-1).

IT 244131-33-7P

(preparation of peptides as inhibitors of caspases)

RN 244131-33-7 HCAPLUS

CN L-Prolinamide, N-[(3-phenyl-4-cinnolinyl)carbonyl]-L-valyl-N-[(1S)-2-carboxy-1-formylethyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

IC ICM C07K005-023

244131-39-3P

ICS A61K038-04; A61K031-47; A61K038-03; C07D401-12

244131-40-6P

CC 34-3 (Amino Acids, Peptides, and Proteins)

Section cross-reference(s): 1, 7

IT Sarcoma

(Kaposi's; preparation of peptides as inhibitors of caspases)

IT Melanoma

IT

(metastatic; preparation of peptides as inhibitors of caspases)

244131-41-7P

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   (preparation of peptides as inhibitors of caspases)
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80,986, abandoned. CODEN: USXXAM

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5684151	A	19971104	US 1995-362476	19950306
WO 9401412	A1	19940120	•	19930701
	, BG, BR, CA , PL, RO, RU		HU, JP, KP, KR, LK,	MG, MN, MW,
RW: AT, BE		, ES, FR,	GB, GR, IE, IT, LU,	MC, NL, PT,
PRIORITY APPLN. INFO		, 62, 6,	US 1992-906984	B1 19920701
			US 1993-80986	B2 19930621
			WO 1993-US6394 <	W 19930701

GI

Title compds. such as I [R = 2-naphthyl, (un) substituted Ph, 2-thienyl; Rl = H, Me; W = a bond, CH:CH; R2 = (un) substituted Ph, 2-naphthyl] were prepared Progestin receptor binding, progestational and antiprogestational activity, osteoblast cell proliferation, and CNS receptor binding of the products were determined

IT 71094-17-2P

(1-(arylsulfonyl)-, 1-(arylcarbonyl)-, and 1-(arylphosphonyl)-3-phenyl-1,4,5,6-tetrahydropyridazines as progestin agonists)

RN 71094-17-2 HCAPLUS

CN 1H-Cyclopenta[c]pyridazine, 4,4a,5,7a-tetrahydro-1-[(4-methylphenyl)sulfonyl]-3-phenyl- (9CI) (CA INDEX NAME)

ICS C07D409-04; C07D237-26

159799-92-5P

INCL 544224000 28-15 (Heterocyclic Compounds (More Than One Hetero Atom)) Section cross-reference(s): 1 159797-68-9P 159797-69-0P IT 71094-17-2P 109809-47-4P 159797-70-3P 159797-71-4P 159797-72-5P 159797-73-6P 159797-74-7P 159797-75-8P 159797-76-9P 159797-77-0P 159797-79-2P 159797-80-5P 159797-81-6P 159797-78-1P 159797-82-7P 159797-83-8P 159797-84-9P 159797-85-0P 159797-89-4P 159797-86-1P 159797-87-2P .159797-88-3P 159797-93-0P 159797-92-9P 159797-90-7P 159797-91-8P 159797-97-4P 159797-94-1P 159797-95-2P 159797-96-3P 159797-98-5P 159797-99-6P 159798-00-2P 159798-01-3P 159798-04-6P 159798-05-7P 159798-02-4P 159798-03-5P 159798-07-9P 159798-08-0P 159798-09-1P 159798-06-8P 159798-11-5P 159798-12-6P 159798-13-7P 159798-10-4P 159798-17-1P 159798-16-0P 159798-14-8P 159798-15-9P 159798-19-3P 159798-20-6P 159798-21-7P 159798-18-2P 159798-24-0P 159798-25-1P 159798-22-8P 159798-23-9P 159798-29-5P 159798-26-2P 159798-27-3P 159798-28-4P 159798-30-8P 159798-31-9P 159798-32-0P 159798-33-1P 159798-35-3P 159798-36-4P 159798-37-5P 159798-34-2P 159798-40-0P 159798-41-1P 159798-38-6P 159798-39-7P 159798-44-4P 159798-45-5P 159798-42-2P 159798-43-3P 159798-48-8P 159798-49-9P 159798-46-6P 159798-47-7P 159798-51-3P 159798-52-4P 159798-53-5P 159798-50-2P 159798-55-7P 159798-56-8P 159798-57-9P 159798-54-6P 159798-59-1P 159798-60-4P 159798-61-5P 159798-58-0P 159798-65-9P 159798-64-8P 159798-62-6P 159798-63-7P 159798-67-1P 159798-68-2P 159798-69-3P 159798-66-0P 159798-73-9P 159798-71-7P 159798-72-8P 159798-70-6P 159798-77-3P 159798-76-2P 159798-75-1P 159798-74-0P 159798-79-5P 159798-80-8P 159798-81-9P 159798-78-4P 159798-85-3P 159798-84-2P 159798-82-0P 159798-83-1P 159798-89-7P 159798-88-6P 159798-86-4P 159798-87-5P 159798-92-2P 159798-93-3P 159798-90-0P 159798-91-1P 159798-95-5P 159798-96-6P 159798-99-9P 159798-94-4P 159799-03-8P 159799-04-9P 159799-00-5P 159799-01-6P 159799-07-2P 159799-08-3P 159799-05-0P 159799-06-1P 159799-11-8P 159799-12-9P 159799-09-4P 159799-10-7P 159799-16-3P 159799-13-0P 159799-14-1P 159799-15-2P 159799-17-4P 159799-20-9P 159799-21-0P 159799-23-2P 159799-24-3P 159799-25-4P 159799-26-5P 159799-30-1P 159799-29-8P 159799-27-6P 159799-28-7P 159799-32-3P 159799-33-4P 159799-34-5P 159799-31-2P 159799-36-7P 159799-37-8P 159799-38-9P 159799-35-6P 159799-41-4P 159799-42-5P 159799-40-3P 159799-39-0P 159799-46-9P 159799-43-6P 159799-44-7P 159799-45-8P 159799-49-2P 159799-50-5P 159799-47-0P 159799-48-1P 159799-52-7P 159799-53-8P 159799-54-9P 159799-51-6P 159799-58**-**3P 159799-.57-2P 159799-55-0P 159799-56-1P 159799-59-4P 159799-60-7P 159799-61-8P 159799-62-9P 159799-66-3P 159799-63-0P 159799-64-1P 159799-65-2P 159799-69-6P 159799-70-9P 159799-71-0P 159799-68-5P 159799-75-4P 159799-72-1P 159799-73-2P 159799-74-3P 159799-78-7P 159799-79-8P 159799-76-5P 159799-77-6P 159799-82-3P 159799-83-4P 159799-81-2P 159799-80-1P 159799-87-8P 159799-86-7P 159799-84-5P 159799-85-6P 159799-89-0P 159799-90-3P 159799-91-4P 159799-88-9P

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159799-95-8P

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(1-(arylsulfonyl)-, 1-(arylcarbonyl)-, and 1-(arylphosphonyl)-3-phenyl-1,4,5,6-tetrahydropyridazines as progestin agonists)

L63 ANSWER 9 OF 13 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1995:257968 HCAPLUS Full-text

DOCUMENT NUMBER: 122:31542
TITLE: Preparation of 1-arylsulfonyl, arylcabonyl and

1-arylphosphonyl-3-phenyl-1,4,5,6-

tetrahydropyridazine progestin agonists

INVENTOR(S): Combs, Donald W.

PATENT ASSIGNEE(S): Ortho Pharma Corp., USA SOURCE: PCT Int. Appl., 73 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

LANGUAGE:

Patent English

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

PA'	TENT NO.			KINI		APPLICATION NO.	DATE
WO	9401412					WO 1993-US6394	19930701
٠.					CA, CZ, FI, RU, SD, SE,	HU, JP, KP, KR, LK,	MG, MN, MW,
	RW: AT,	BE,	CH,	DE,		GB, GR, IE, IT, LU,	MC, NL, PT,
UA	9346670					AU 1993-46670	19930701
	668206			В2	·		
ЕР	650480			A1	19950503	EP 1993-917006 <	19930701
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HU	68424	ъь,		, A2			19930701
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BR	9306661			A	19981208		19930701
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US	5684151			A	19971104	US 1995-362476 <	19950306
PRIORIT	Y APPLN.	INFO	. :			US 1992-906984 <	A2 19920701
	•					US 1993-80986 <	A2 19930621
•	•	•				WO 1993-US6394	W 19930701

OTHER SOURCE(S):

MARPAT 122:31542

The title compds. [I; A = Q1, Q2; R1 = halogen, CF3, NO2; R3 = H, C1-6 (un)branched alkyl, halogen, CF3; R5 = H, Me; W = direct bond, CH:CH; R1R1 = CH:CHCH:CH], useful as contraceptives and in the treatment of osteoporosis, and which bind to the GABAA receptor, are prepared Thus, tetrahydropyridazine II (m.p. 148-149°) was prepared and demonstrated a IC50 (i.e., binding affinity for the rabbit uterus progestin receptor) of 5.3 nM.

T1094-17-2P

(preparation of 1-arylsulfonyl, arylcabonyl and 1-arylphosphonyl-3-phenyl-1,4,5,6-tetrahydropyridazine progestin agonists)

159797-92-9P

159797-96-3P

159797-93-0P

159797-97-4P

RN 71094-17-2 HCAPLUS

CN lH-Cyclopenta[c]pyridazine, 4,4a,5,7a-tetrahydro-1-[(4-methylphenyl)sulfonyl]-3-phenyl- (9CI) (CA INDEX NAME)

159797-90-7P

159797-94-1P

IC C07D237-04; C07D409-04; C07F096-509; A61K031-50 CC 28-15 (Heterocyclic Compounds (More Than One Hetero Atom)) Section cross-reference(s): 1, 63 IT 71094-17-2P 109809-47-4P 159797-68-9P 159797-69-0P 159797-70-3P 159797-71-4P 159797-72-5P 159797-73-6P 159797-74-7P 159797-75-8P 159797-76-9P 159797-77-0P 159797-78-1P 159797-79-2P 159797-80-5P 159797-81-6P 159797-82-7P 159797-83-8P 159797-84-9P 159797-85-0P 159797-86-1P 159797-87-2P 159797-88-3P 159797-89-4P

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159800-05-2P
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(preparation of 1-arylsulfonyl, arylcabonyl and 1-arylphosphonyl-3-phenyl-1,4,5,6-tetrahydropyridazine progestin agonists)

L63 ANSWER 10 OF 13 HCAPLUS COPYRIGHT 2006 ACS on STN ACCESSION NUMBER: 1993:649853 HCAPLUS Full-text DOCUMENT NUMBER: 119:249853

TITLE: Preparation of 4-cinnolinyl- and

4-naphthyridinyl-1,4-dihydropyridine-3-

carboxylates as inotropics

Straub, Alexander; Stoltefuss, Juergen; Goldmann, INVENTOR(S):

Siegfried; Gross, Rainer; Bechem, Martin; Hebisch,

Siegbert; Huetter, Joachim; Rounding, Howard

PATENT ASSIGNEE(S): Bayer A.-G., Germany Ger. Offen., 23 pp.

SOURCE:

CODEN: GWXXBX

DOCUMENT TYPE:

Patent

1

LANGUAGE: German

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

	PA	TENT :	NO.			KIND DATE				APPLICATION NO.					DATE		
	DE	4202	526					1993	0805	DE	1992-		526			19920130	
	EP	5556	57			A1		1993	0818	EP	-	1006	49			19930118	
		R:	AT, PT,		CH,	DE,	DK,	ES,	FR,	GB, GI	-		LI,	LU,	MC	, NL,	
	US	5364	•	22		Α		1994	1115	US		6592 		`		19930121	
	CA	2088	209			AA		1993	0731	CA	1993-		209			19930127	
	UA	9332	058			A1		1993	0805	AU	1993 <i>-</i> <		8			19930127	
	AU	6644	06			В2		1995	1116								
	ZA	9300	639			А		1993	0830	ZA	1993-		•			19930129	
	JP	0528	6968	•		. A2		1993	1102	JP	1993-	3435 	1			19930129	
	HU	6593	8		٠	A2		1994	0829	HU	1993-					19930129	
	CN	1074	906			A	•	1993	0804	CN	1993-	1006	49			19930130	
•	US	5410	055	٠		A		1995	0425	US	1994-		79			19940421	
PRIO	RIT	Y APP	LN.	INFO	.:					DE		4202	526	A		19920130	
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OTHER SOURCE(S):

MARPAT 119:249853

GI

$$R^2$$
 R^3
 CO_2R^4
 R^6
 Z^1
 R^7
 R^7
 R^7
 R^7
 R^7
 R^2
 R^7
 R^7

Title compds. (I; R1, R5 = alkyl; R2 = alkoxycarbonyl, NO2, cyano; R1R2 = CH2O2C; R3 = cinnolinyl or naphthyridinyl group Q; R4 = H, alkyl, alkenyl, etc.; R6 = H, halo, alkyl, alkoxy; R7 = aryl, pyridyl, thienyl, etc.) were prepared Thus, 3-phenyl-1,7- naphthyridinecarboxaldehyde (preparation given) was cyclocondensed with MeC(NH2):CHCN and MeCOCH2CO2CHMe2 to give title compound II (R1 = Me, R2 = cyano). II (R1R2 = CH2O2C) gave 35% increase in contractility of perfused guinea pig heart at 4-10 g/L.

IT 151026-56-1P

(preparation and reaction of, in preparation of inotropic agent)

RN 151026-56-1 HCAPLUS

CN 4(1H)-Cinnolinone, 5-methyl-3-phenyl- (9CI) (CA INDEX NAME)

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     ICM C07D471-04
          C07D401-04; C07D491-048; C07D213-75; C07D237-28; A61K031-44
    C07D471-04, C07D221-00; C07D401-04, C07D213-75, C07D237-28;
ICI
     C07D491-048, C07D221-00, C07D307-00
CC
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     Section cross-reference(s): 1
                    147440-86-6P
                                   147440-87-7P, 5-Methyl-3-phenyl-1,7-
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     147440-85-5P
                     147440-88-8P, 3-Phenyl-1,7-naphthyridine-5-
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                      151026-55-0P 151026-56-1P
    carboxaldehyde
     151026-57-2P, 4-Chloro-5-methyl-3-phenylcinnoline
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IT
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(preparation of, as inotropic)

L63 ANSWER 11 OF 13 HCAPLUS COPYRIGHT 2006 ACS on STN ACCESSION NUMBER: 1966:465520 HCAPLUS Full-text

DOCUMENT NUMBER: 65:65520
ORIGINAL REFERENCE NO.: 65:12203b-c

TITLE: Synthesis of potential antineoplastic agents. XV.

Some 1,4-bisamides of 1,2,3,4-

tetrahydroquinoxaline

AUTHOR(S): Schuyler, Peter; Popp, Frank D.; Noble, Adria

Catala; Alwani, Dru W.; Masters, Barry R.

CORPORATE SOURCE: Clarkson Coll. of Technol., Potsdam, NY

SOURCE: Journal of Medicinal Chemistry (1966), 9(5), 704-7

CODEN: JMCMAR; ISSN: 0022-2623

DOCUMENT TYPE: Journal LANGUAGE: English

AB cf. CA 65, 5459c. A number of Cl-containing and unsatd. 1,4-bisamides have been prepared from 1,2,3,4-tetrahydroquinoxaline and from substituted 1,2,3,4-tetrahydroquinoxalines. Although many of these amides are active against KB cell culture, they are inactive against animal tumors. A number of related amides were also prepared from 1,2,3,4-tetrahydroquinoline and 1,2,3,4-tetrahydroisoquinoline.

IT 724-15-2, 4-Cinnolinol, 3-phenyl-

(preparation of)

RN 724-15-2 HCAPLUS

CN 4-Cinnolinol, 3-phenyl- (7CI, 8CI, 9CI) (CA INDEX NAME)

CC 38 (Heterocyclic Compounds (More Than One Hetero Atom))

IT Neoplasms

(inhibitors of, 1,4-diacyl-1,2,3,4-tetrahydroquinoxaline derivs.

IT 724-15-2, 4-Cinnolinol, 3-phenyl- 5569-08-4,

Cinnoline, 4-(benzylamino)-3-phenyl- 5569-09-5, Cinnoline,

4-(phenethylamino)-3-phenyl- 6450-85-7, Cinnoline,

4-(4-methyl-1-piperazinyl)-3-phenyl- 6482-16-2, Cinnoline,

3-phenyl-4-(1-piperazinyl)- **6534-46-9**, Cinnoline,

4-hydrazino-3-phenyl-, hydrochloride 6687-72-5, Quinoxaline,

1,4-diacryloyl-1,2,3,4-tetrahydro-2,3-dimethyl- 6687-73-6,

Quinoxaline, 1,4-bis(3-chloropropionyl)-1,2,3,4-tetrahydro-6,7-

dimethyl- 6687-74-7, Quinoxaline, 1,4-diacryloyl-1,2,3,4-tetrahydro-

6,7-dimethyl- 6687-75-8, Dibenzo[f,h]quinoxaline,

1,4-bis(chloroacetyl)-1,2,3,4-tetrahydro- 6687-76-9,

Dibenzo[f,h]quinoxaline, 1,4-bis(3-chloropropionyl)-1,2,3,4-tetrahydro-

6687-92-9, Quinoxaline, 1,4-bis(3-chloropropionyl)-1,2,3,4-

tetrahydro- 6699-43-0, Quinoxaline, 1,4-bis(4-chlorobutyryl)-1,2,3,4-

tetrahydro- 6699-44-1, Quinoxaline, 1,4-diacryloyl-1,2,3,4-

tetrahydro- 6699-45-2, Quinoxaline, 1,4-dicinnamoyl-1,2,3,4-

tetrahydro- 6699-46-3, Quinoxaline, 1,2,3,4-tetrahydro-1,4-

dimethacryloyl- 6699-47-4, Quinoxaline, 1,4-bis(chloroacetyl)-

1,2,3,4-tetrahydro-2-methyl- 6699-48-5, Quinoxaline,

1,4-bis(3-chloropropionyl)-1,2,3,4-tetrahydro-2-methyl- 6699-49-6,

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Quinoxaline, 1,4-diacryloyl-1,2,3,4-tetrahydro-2-methyl-
    Quinoxaline, 1,4-bis(chloroacetyl)-1,2,3,4-tetrahydro-2,3-dimethyl-
    6717-60-8, Quinoxaline, 1,4-bis(chloroacetyl)-1,2,3,4-tetrahydro-6,7-
                 6779-93-7, Quinoxaline, 1,4-bis(chloroacetyl)-1,2,3,4-
    dimethyl-
    tetrahydro-
                   6779-95-9, Quinoxaline, 1,4-bis(3-chloropropionyl)-
     1,2,3,4-tetrahydro-2,3-dimethyl- 6798-71-6, Quinoxaline,
    1,4-bis(dichloroacetyl)-1,2,3,4-tetrahydro-7623-99-6,
    Cinnoline, 3-(p-chlorophenyl)-, 1-oxide 7628-75-3,
    Cinnoline, 3-(p-methoxyphenyl)-, 1-oxide 7628-78-6,
    Cinnoline, 3-phenyl-, 1-oxide 7628-79-7, Cinnoline,
    3-phenyl-, 2-oxide 7628-90-2, Cinnoline,
     4-[[3-(dimethylamino)propyl]methylamino]-3-phenyl-, dihydrochloride
    7678-80-0, Cinnoline, 3-(p-chlorophenyl) - 7678-83-3,
    Cinnoline, 3-(p-methoxyphenyl) - 10001-21-5, Cinnoline,
     3-(p-chlorophenyl)-4-(4-methyl-1-piperazinyl)- 10001-22-6,
    Cinnoline, 3-(p-methoxyphenyl)-4-(4-methyl-1-piperazinyl)-
     10001-23-7, 1-Piperazineethanol, 4-(3-phenyl-4-cinnolinyl)-
     10001-25-9, Piperazine, 1-acetyl-4-(3-phenyl-4-cinnolinyl)-
     10001-27-1, Cinnoline, 3-phenyl-4-(4-phenyl-1-piperazinyl)-
     10001-28-2, Cinnoline, 4-(4-benzyl-1-piperazinyl)-3-phenyl-
     10501-72-1, Cinnoline, 6-methyl-3-phenyl- 10501-76-5
     , Cinnoline, 3-(p-chlorophenyl)-6-methyl- 10579-35-8,
     Cinnoline, 4-(4-nitroso-1-piperazinyl)-3-phenyl- 10579-38-1,
     Piperazine, 1-(p-chlorobenzoyl)-4-(3-phenyl-4-cinnolinyl)-
     10579-39-2, 4-Cinnolinol, 3-(p-chlorophenyl)-
                                                      10579-40-5,
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                                                         10579-53-0,
     Quinoxaline, 1,4-dicrotonoyl-1,2,3,4-tetrahydro-
                                                         10579-59-6,
                                                  10579-60-9, Quinoline,
     Quinoline, 1-crotonoyl-1,2,3,4-tetrahydro-
     1,2,3,4-tetrahydro-1-methacryloyl-
                                           10579-61-0, Quinoline,
                                            10579-62-1, Isoquinoline,
     1,1'-maleoylbis[1,2,3,4-tetrahydro-
     2-(dichloroacetyl)-1,2,3,4-tetrahydro-
                                               10579-63-2, Isoquinoline,
     1,2,3,4-tetrahydro-2-methacryloyl-
                                          10579-64-3, Isoquinoline,
     2-crotonoyl-1,2,3,4-tetrahydro- 10579-65-4, Isoquinoline,
                                       10579-66-5, Isoquinoline,
     2-cinnamoyl-1,2,3,4-tetrahydro-
                                            10579-67-6, Isoquinoline,
     2,2'-maleoylbis[1,2,3,4-tetrahydro-
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                                                  10579-68-7, Quinoxaline,
     1,2,3,4-tetrahydro-6,7-dimethyl-
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     Dibenzo[f,h]quinoxaline, 1,2,3,4-tetrahydro-
                                                     10579-70-1,
     Quinoxaline, 1-(3-chloropropionyl)-4-ethyl-1,2,3,4-tetrahydro-,
                    10579-71-2, 1,4-Quinoxalinedicarboxaldehyde,
     hydrochloride
                    10579-72-3, 1,4-Quinoxalinedicarbonyl chloride,
     2,3-dihydro-
     2,3-dihydro- 10579-73-4, Quinoxaline, 1,4-bis(2-chloroeth tetrahydro-, hydrochloride 10604-22-5, Cinnoline, 3-phenyl-
                    10579-73-4, Quinoxaline, 1,4-bis(2-chloroethyl)-1,2,3,4-
     10604-24-7, 4-Cinnolinol, 3-(p-hydroxyphenyl)-
     10604-38-3, Cinnoline, 3-phenyl-4-piperidino-
     10604-40-7; Cinnoline, 4-p-anisidino-3-phenyl-
     10604-48-5, Cinnoline, 4-[4-[2-(dimethylamino)ethyl]piperidino
     ]-3-phenyl- 10604-52-1, Cinnoline, 4-[[2-
     (dimethylamino)ethyl]methylamino]-3-phenyl- 13262-31-2, Quinoline,
     1-cinnamoyl-1,2,3,4-tetrahydro-
        (preparation of)
                      HCAPLUS COPYRIGHT 2006 ACS on STN
L63 ANSWER 12 OF 13
ACCESSION NUMBER:
                         1966:465519 HCAPLUS Full-text
                          65:65519
DOCUMENT NUMBER:
ORIGINAL REFERENCE NO.:
                         65:12203b
TITLE:
                          3-Phenylcinnolines. II. Preparation of 4-amino
                         derivatives
                          Lowrie, Harman S.
AUTHOR(S):
                         Div. of Chem. Res., G. D. Searle & Co., Chicago
CORPORATE SOURCE:
```

SOURCE: Journal of Medicinal Chemistry (1966), 9(5), 670-4

CODEN: JMCMAR; ISSN: 0022-2623

DOCUMENT TYPE: LANGUAGE: Journal English

AB cf. preceding abstract The development of methods for converting 3-phenylcinnoline-4-carboxylic acids into the 4-hydroxy and 4-chloro analogs led to the preparation of 4-amino compds. which were examined for pharmacol. activity. 27 references.

IT 33738-83-9, Cinnoline, 4-amino-3-phenyl-

(derivs.)

RN 33738-83-9 HCAPLUS

CN 4-Cinnolinamine, 3-phenyl- (9CI) (CA INDEX NAME)

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CC
     38 (Heterocyclic Compounds (More Than One Hetero Atom))
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     Neoplasms
        (inhibitors of, 4-amino-3-phenylcinnoline derivs. as)
     33738-83-9, Cinnoline, 4-amino-3-phenyl-
IT
        (derivs.)
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     Ethanol, 2-[2-[(3-phenyl-4-cinnolinyl)amino]ethoxy]- 5569-08-4
     , Cinnoline, 4-(benzylamino)-3-phenyl- 5569-09-5, Cinnoline,
     4-(phenethylamino)-3-phenyl- 5569-11-9, Ethanol,
     2-[(3-phenyl-4-cinnolinyl)amino]- 6450-85-7, Cinnoline,
     4-(4-methyl-1-piperazinyl)-3-phenyl- 6482-15-1, Cinnoline,
     4-[[2-(diethylamino)ethyl]amino]-3-phenyl- 6482-16-2,
     Cinnoline, 3-phenyl-4-(1-piperazinyl)- 6505-22-2, Cinnoline,
     4-[[2-(dimethylamino)ethyl]amino]-3-phenyl- 6534-46-9,
     Cinnoline, 4-hydrazino-3-phenyl-, hydrochloride 7623-99-6,
     Cinnoline, 3-(p-chlorophenyl)-, 1-oxide 7628-75-3,
     Cinnoline, 3-(p-methoxyphenyl)-, 1-oxide 7628-77-5,
     Cinnoline, 4-chloro-3-(p-methoxyphenyl)- 7628-78-6,
     Cinnoline, 3-phenyl-, 1-oxide 7628-79-7, Cinnoline,
     3-phenyl-, 2-oxide 7628-84-4, Cinnoline,
     4-[[4-(diethylamino)-1-methylbutyl]amino]-3-phenyl- 7628-85-5
     , Cinnoline, 3-(p-chlorophenyl)-4-[[3-(dimethylamino)propyl]amino]-
     7628-87-7, Cinnoline, 4-[[3-(dimethylamino)propyl]amino]-3-
     phenyl-, dihydrochloride 7628-88-8, Cinnoline,
     4-[(2-aminoethyl)amino]-3-phenyl-, dihydrochloride 7628-90-2
     , Cinnoline, 4-[[3-(dimethylamino)propyl]methylamino]-3-phenyl-,
     dihydrochloride 7628-91-3, Cinnoline, 3-phenyl-4-[[2-(1-
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     3-phenyl-4-[(2-piperidinoethyl)amino] - 7628-93-5, Cinnoline,
     4-[(3-morpholinopropyl)amino]-3-phenyl- 7678-80-0,
     Cinnoline, 3-(p-chlorophenyl) - 7678-81-1, Cinnoline,
     4-chloro-3-(pchlorophenyl) - 7678-83-3, Cinnoline,
     3-(p-methoxyphenyl) - 10001-21-5, Cinnoline,
     3-(p-chlorophenyl)-4-(4-methyl-1-piperazinyl)- 10001-22-6,
     Cinnoline, 3-(p-methoxyphenyl)-4-(4-methyl-1-piperazinyl)-
     10001-23-7, 1-Piperazineethanol, 4-(3-phenyl-4-cinnolinyl)-
     10001-25-9, Piperazine, 1-acetyl-4-(3-phenyl-4-cinnolinyl)-
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10001-27-1, Cinnoline, 3-phenyl-4-(4-phenyl-1-piperazinyl)-
     10001-28-2, Cinnoline, 4-(4-benzyl-1-piperazinyl)-3-phenyl-
     10501-72-1, Cinnoline, 6-methyl-3-phenyl- 10501-76-5
     , Cinnoline, 3-(p-chlorophenyl)-6-methyl- 10579-35-8,
     Cinnoline, 4-(4-nitroso-1-piperazinyl)-3-phenyl- 10579-38-1,
     Piperazine, 1-(p-chlorobenzoyl)-4-(3-phenyl-4-cinnolinyl)-
     10579-39-2, 4-Cinnolinol, 3-(p-chlorophenyl)-
     10604-22-5, Cinnoline, 3-phenyl- 10604-24-7,
     4-Cinnolinol, 3-(p-hydroxyphenyl)- 10604-33-8,
     4-Cinnolinecarboxylic acid, 3-(p-hydroxyphenyl)- 10604-38-3,
     Cinnoline, 3-phenyl-4-piperidino- 10604-40-7, Cinnoline,
     4-p-anisidino-3-phenyl- 10604-48-5, Cinnoline,
     4-[4-[2-(dimethylamino)ethyl]piperidino]-3-phenyl- 10604-52-1
     , Cinnoline, 4-[[2-(dimethylamino)ethyl]methylamino]-3-phenyl-
     13109-11-0, Cinnoline, 4-chloro-3-phenyl-
        (preparation of)
L63 ANSWER 13 OF 13
                      HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER:
                         1966:465518 HCAPLUS Full-text
DOCUMENT NUMBER:
                         65:65518
ORIGINAL REFERENCE NO.:
                         65:12203a-b
TITLE:
                         3-Phenylcinnolines. I. Some reactions and
                         derivatives of 3-phenylcinnoline-4-carboxylic
                         acids
                         Lowrie, Harman S.
AUTHOR(S):
                         Div. of Chem. Res., G. D. Searle & Co., Chicago
CORPORATE SOURCE:
SOURCE:
                         Journal of Medicinal Chemistry (1966), 9(5), 664-9
                         CODEN: JMCMAR; ISSN: 0022-2623
DOCUMENT TYPE:
                         Journal
LANGUAGE:
                         English
                         CASREACT 65:65518
OTHER SOURCE(S):
     A series of amide, hydrazide, and ester derivs. of the title acids and 2
     phenylbutazone analogs of 3-phenylcinnoline were prepared These were examined
     for pharmacol. activity. 21 references.
     10604-21-4, 4-Cinnolinecarboxylic acid, 3-phenyl-
        (derivs.)
     10604-21-4 HCAPLUS
     4-Cinnolinecarboxylic acid, 3-phenyl- (6CI, 7CI, 8CI, 9CI)
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IT

RN

CN

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38 (Heterocyclic Compounds (More Than One Hetero Atom))
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     Neoplasms
        (inhibitors of, 1,4-diacyl-1,2,3,4-tetrahydroquinoxaline derivs.
IT
     Neoplasms
        (inhibitors of, 3-phenyl-4-cinnolinecarboxylic acid derivs. as)
IT
     Neoplasms
        (inhibitors of, 4-amino-3-phenylcinnoline derivs. as)
     10604-21-4, 4-Cinnolinecarboxylic acid, 3-phenyl-
IT
     10604-22-5, Cinnoline, 3-phenyl- 33738-83-9,
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Cinnoline, 4-amino-3-phenyl-
        (derivs.)
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     724-15-2, 4-Cinnolinol, 3-phenyl-
                                         4964-49-2, Acetophenone,
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     phenyl- 5569-09-5, Cinnoline, 4-(phenethylamino)-3-phenyl-
     5701-19-9, 4-Cinnolinecarboxylic acid, 3-phenyl-,
     3-(dimethylamino)propyl ester 5701-39-3,
     4-Cinnolinecarboxylic acid, 3-phenyl-, 3-(dimethylamino)propyl ester,
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     6450-85-7, Cinnoline, 4-(4-methyl-1-piperazinyl)-3-phenyl-
     6482-02-6, Anthranilic acid, N-(3-phenyl-4-cinnolinyl)-,
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    N-benzyl-3-phenyl- 6482-14-0, 4-Clinolinecarboxamide,
     N-[3-(dimethylamino)propyl]-3-phenyl- 6482-16-2, Cinnoline,
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     4-hydrazino-3-phenyl-, hydrochloride 6546-53-8,
     4-Clinolinecarboxamide, N-[2-(dipropylamino)ethyl]-3-phenyl-
     6546-54-9, Piperazine, 1-[(3-phenyl-4-cinnolinyl)carbonyl]-
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                               7623-97-4, Indole-2,3-dione,
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                          7628-80-0, Benzaldehyde, p-chloro-,
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     10001-25-9, Piperazine, 1-acetyl-4-(3-phenyl-4-cinnolinyl)-
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     cinnolinyl) - 10579-39-2, 4-Cinnolinol, 3-(p-chlorophenyl) -
     10604-09-8, Piperazine, 1-amino-4-[(3-phenyl-4-
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acid, 3-phenyl-, hydrazide 10604-12-3, 4-Cinnolinecarboxylic
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     cinnoliny1)carbony1]- 13004-91-6, 1H-Pyrazolo[1,2-a]cinnoline-1,3-
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                                               13239-36-6,
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     1,4-dihydro-3-phenyl-, ethyl ester
        (preparation of)
                         2005:1329720 HCAPLUS Full-text
DOCUMENT NUMBER:
                         144:69841
                         Preparation of 3-phenyltetrahydrocinnolin-5-ol
                         derivatives as antitumor agents
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=> d 132 1-2 ibib abs

L32 ANSWER 1 OF 2 HCAPLUS COPYRIGHT 2006 ACS on STN ACCESSION NUMBER:

TITLE:

`Sato, Yoshitaka; Suzuki, INVENTOR(S):

Yoshikazu; Yamamoto, Keiichiro; Kuroiwa,

Shunsuke; Maruyama, Sakiko

Nippon Kayaku Kabushiki Kaisha, Japan

PCT Int. Appl., 41 pp. SOURCE:

CODEN: PIXXD2

DOCUMENT TYPE:

Patent Japanese LANGUAGE:

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT ASSIGNEE(S):

PATENT NO	KINI)	DATE			APPLICATION NO.						DATE		
														
WO 2005121105			A1 20051222			,	WO 2	20050608						
W: A	AE, AG,	AL,	AM,	AT,	ΑU,	ΑZ,	BA,	BB,	BG,	BR,	BW,	BY,	BZ,	CA,
_ (CH, CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	EG,	ES,	FI,

GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GO, GW, ML, MR, NE, SN, TD, TG PRIORITY APPLN. INFO.:

JP 2004-171426

A 20040609

OTHER SOURCE(S):

MARPAT 144:69841

GΙ

$$\begin{array}{c|c} X & & & \\ \hline X & & \\ X & & \\ \hline X & & \\ X & & \\ \hline X & & \\ X & & \\ \hline X & & \\ X & & \\ \hline X & & \\ X & & \\ \hline X & & \\ X & & \\ \hline X & & \\ X & & \\ \hline X & & \\ X & & \\ \hline X & & \\ X & & \\ \hline X & & \\ X & & \\ \hline X & & \\ X & & \\ \hline X & &$$

Title compds. I [Z = M-, L(L')N-, A(B)CH-; M = alkoxy, alkylamino, optionallyAΒ substituted alkyl with saturated heterocycle; L, L' = hydroxy, alkoxy, carboxy, etc.; A = H, hydroxy, alkyl; B = substituted alkyl, alkoxy, carboxy, etc.; X = alkyl, alkoxycarbonyl, acylamino, etc.; X' = alkyl, alkoxycarbonyl, acylamino, etc.; Y, Y' = H, alkyl] were prepared. For example, EDC mediated acylation of 7-methyl-3-(3- trifluoromethylphenyl)-5,6,7,8-tetrahydrocinnolin-5-ol, e.g., prepared from 3'-trifluoromethylacetophenone in 5 steps, with ethoxyacetic acid afforded compound II in 98.8% yield. In antitumor assays in vitro, the IC50 value of compound II was 0.135 $\mu g/mL$. Compds. I are claimed useful for the treatment of tumor.

REFERENCE COUNT:

THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

COPYRIGHT 2006 ACS on STN HCAPLUS L32 ANSWER 2 OF 2 2004:515490 HCAPLUS Full-text ACCESSION NUMBER:

3

DOCUMENT NUMBER: 141:71553

TITLE:

Preparation of 3-phenylcinnoline homologues as

antitumor agents

INVENTOR(S):

Kuroiwa, Shunsuke; Odanaka, Junko; Maruyama, Sakiko; Sato, Yoshitaka; Tomura, Arihiro; Sato,

Hiroshi; Suzuki, Yoshikazu

PATENT ASSIGNEE(S):

Nippon Kayaku Kabushiki Kaisha, Japan

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PCT Int. Appl., 68 pp.

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Patent

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Japanese

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

I									APPLICATION NO.						DATE		
V	40 								WO 2003-JP15767								
		W:	ΑE,	AG,	AL,	AM,	AT,	AU,	ΑZ,	BA,	BB,	BG,	BR,	BW,	BY,	ΒZ,	CA,
			CH,	CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	ΕĖ,	EG,	ES,	FI,
			GB,	GD,	GE,	GH,	GM,	HR,	HU,	ID,	ΙL,	IN,	IS,	JP,	KE,	KG,	KP,
			KR,	ΚZ,	LC,	LK,	LR,	LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,
			MX,	MZ,	NI,	NO,	NZ,	OM,	PG,	PH,	PL,	PT,	RO,	RU,	SC,	SD,	SE,
			SG,	SK,	SL,	SY,	TJ,	TM,	TN,	TR,	TT,	TZ,	UA,	ÜĠ,	US,	UZ,	VC,
			VN,	YU,	ZA,	ZM,	zw										
		RW:	BW,	GH,	GM,	ΚE,	LS,	MW,	MZ,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	AM,
			ΑZ,	BY,	KG,	ΚZ,	MD,	RU,	TJ,	TM,	ΑT,	BE,	BG,	CH,	CY,	CZ,	DE,
			DK,	EE,	ES,	FI,	FR,	GB,	GR,	HU,	ΙE,	ΙT,	LU,	MC,	NL,	PT,	RO,
			SE,	SI,	SK,	TR,	BF,	ВJ,	CF,	CG,	CI,	CM,	GA,	GN,	GQ,	GW,	ML,
			MR,	NE,	SN,	TD,	TG				•						
(CA	2508	010			AA		2004	0624		CA 2	003-	2508	010		2	0031210
7	UA	J 2003289002							AU 2003-289002								
. I	ΕP	1571	148			A1		2005	0907		EP 2	о́03 -	7787	63		2	0031210
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	•		PT,	ΙE,	SI,	LT,	LV,	FI,	RO,	MK,	CY,	AL,	TR,	BG,	CZ,	ΕĒ,	HU, SK
I	BR	2003	0171	19													0031210
	_	1735															0031210
Ţ	US,	2006	0583	05		A1		2006	0316								0050606
PRIOR	ORITY APPLN. INFO.:						•				JP 2	002-	3575	56	1	A · 2	0021210
											JP 2	003-	1660	82	i	A 2	0030611
		•									JP 2	003-	1837	66	j	A 2	0030627
		~									WO 2	003-	JP15	767	1	W 2	0031210

OTHER SOURCE(S):

MARPAT 141:71553

GI

Title compds. I [A = O-Y; Y = H, (un) substituted alkyl with Ph, etc.; B = H, alkyl, further details on A, B are given; L = N-W, W-C-W'; W, W' = (un) substituted alkyl, Ph, carboxyl, etc.; X = alkyl, alkoxycarbonyl, acylamino, etc.; X' = alkyl, alkoxycarbonyl, acylamino, etc.; m, q = 0-3; n, n' = 0, 1] and their physiol. acceptable salt were prepared In antitumor

activity assays (in vitro) against breast cancer cell CF-7, compds. I showed IC50 values ranging from 0.0388 to 3.5700 $\mu g/mL$, e.g., the IC50 value of compound I [A and B = carbonyl; L = PhCH; X = 3-CF3-Ph; X' = H; m = q = n = n' = 0] was 0.0388 $\mu g/mL$. Compds. I are claimed useful as antitumor, cytostatic agents.

=> d his ful

L10

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FILE 'REGISTRY' ENTERED AT 10:10:34 ON 08 DEC 2006
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              STR
L3
              6 SEA SSS SAM L3
L4
L5
              2 SEA ABB=ON PLU=ON L2 AND L4
                STR L3
L6
             17 SEA SSS SAM L6
L7
            941 SEA SSS FUL L6
L8
             80 SEA ABB=ON PLU=ON L2 AND L8
L9
                SAV L8 JAI126/A
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FILE 'HCAPLUS' ENTERED AT 10:31:26 ON 08 DEC 2006 2 SEA ABB=ON PLU=ON L9

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L11
           153 SEA ABB=ON PLU=ON
               D SCAN L1
L12 '
           118 SEA ABB=ON PLU=ON L11(L)PREP/RL
L13
            11 SEA ABB=ON PLU=ON L12 AND THU/RL
L1.4
            13 SEA ABB=ON PLU=ON L11 AND THU/RL
            13 SEA ABB=ON PLU=ON (L13 OR L14)
L15
               D 13 IBIB HITSTR
L16
           105 SEA ABB=ON PLU=ON L12 AND (1840-2002)/PRY,AY,PY
               E ANTITUMOR/CT
               E E6+ALL
                                   "ANTITUMOR AGENTS"+PFT, NT, OLD/CT
L17
               QUE ABB=ON PLU=ON
             1 SEA ABB=ON PLU=ON L16 AND L17
L18
             2 SEA ABB=ON PLU=ON L11 AND L17
L19
               D 2 IBIB
L20
               QUE ABB=ON PLU=ON. CANCER? OR CARCINOMA? OR MELANOMA? OR
               NEOPLAS? OR TUMOR? OR TUMOUR? OR MALIGNAN? OR SARCOMA?
             6 SEA ABB=ON PLU=ON L11 AND L20
L21
            16 SEA ABB=ON PLU=ON L15 OR (L18 OR L19) OR L21
L22
             8 SEA ABB=ON PLU=ON L11 AND PAC/RL
L23
            16 SEA ABB=ON PLU=ON L22 OR L23
L24
L25
           287 SEA ABB=ON PLU=ON KUROIWA, S?/AU
             6 SEA ABB=ON PLU=ON ODANAKA, J?/AU
L26
            23 SEA ABB=ON PLU=ON MARUYAMA, SAKIKO?/AU
L27
         13838 SEA ABB=ON PLU=ON SATO, Y?/AU
L28
L29
             1 SEA ABB=ON PLU=ON TOMURA, A/AU
L30
         15467 SEA ABB=ON PLU=ON SATO, H?/AU
L31
         18718 SEA ABB=ON PLU=ON SUZUKI, Y?/AU
L32
              2 SEA ABB=ON PLU=ON L11 AND ((L25 OR L26 OR L27 OR L28 OR
               L29 OR L30 OR L31))
     FILE 'MEDLINE' ENTERED AT 10:42:17 ON 08 DEC 2006
               QUE ABB=ON PLU=ON KUROIWA, S?/AU
L33
               OUE ABB=ON PLU=ON ODANAKA, J?/AU
L34
               QUE ABB=ON PLU=ON SATO, Y?/AU
L35
               QUE ABB=ON PLU=ON MARUYAMA, SAKIKO?/AU
L36
               QUE ABB=ON PLU=ON TOMURA, A/AU
L37
               QUE ABB=ON PLU=ON SATO, H?/AU
L38
               QUE ABB=ON PLU=ON SUZUKI, Y?/AU
L39
           128 SEA ABB=ON PLU=ON ((L33 OR L34 OR L35 OR L36 OR L37 OR
L40
               L38 OR L39)) AND (ANTITUMOR? OR ANTITUMOUR)
L41
              O SEA ABB=ON PLU=ON L40 AND CINNOLIN?
              O SEA ABB=ON PLU=ON ((L33 OR L34 OR L35 OR L36 OR L37 OR
L42
               L38 OR L39)) AND CINNOLIN?
     FILE 'EMBASE, WPIX, BIOSIS, DRUGU, DRUGB, VETU, VETB, LIFESCI,
     SCISEARCH, JICST-EPLUS, JAPIO, PASCAL' ENTERED AT 10:47:09 ON 08 DEC
     2006
            28 SEA ABB=ON PLU=ON KUROIWA, SHUNSUKE?/AU
L43
             8 SEA ABB=ON PLU=ON ODANAKA, JUNKO?/AU
L44
            27 SEA ABB=ON PLU=ON MARUYAMA, SAKIKO?/AU
L45
           596 SEA ABB=ON PLU=ON SATO, YOSHITAKA?/AU
L46
            19 SEA ABB=ON PLU=ON TOMURA, ARIHIRO?/AU
           9305 SEA ABB=ON PLU=ON SATO, HIROSHI?/AU
L48
           806 SEA ABB=ON PLU=ON SUZUKI, YOSHIKAZU?/AU
L49
         10775 SEA ABB=ON PLU=ON (L43 OR L44 OR L45 OR L46 OR L47 OR
L50
               L48 OR L49)
L51
              O SEA ABB=ON PLU=ON L50 AND CINNOLIN?
     FILE 'HCAPLUS' ENTERED AT 10:54:24 ON 08 DEC 2006
           137 SEA ABB=ON PLU=ON L11 NOT L24
L52
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L53 90 SEA ABB=ON PLU=ON L11 AND CINNOLIN? L54 87 SEA ABB=ON PLU=ON L53 AND (1840-2002)/PRY,AY,PY FILE 'HCAPLUS' ENTERED AT 11:07:08 ON 08 DEC 2006 L55 7 SEA ABB=ON PLU=ON L16 AND PHARM?/SC,SX 18 SEA ABB=ON PLU=ON L24 OR L55 L56 FILE 'REGISTRY' ENTERED AT 11:09:24 ON 08 DEC 2006 STR L6 L57 L58 9 SEA SUB=L8 SSS SAM L57 168 SEA SUB=L8 SSS FUL L57 L59 SAV L59 JAI126A/A FILE 'HCAPLUS' ENTERED AT 11:11:20 ON 08 DEC 2006

16 SEA ABB=ON PLU=ON L59 L60

FILE 'MARPAT' ENTERED AT 11:13:19 ON 08 DEC 2006

4 SEA ABB=ON PLU=ON L60 L61

O SEA ABB=ON PLU=ON L61 NOT L60 L62

FILE 'HCAPLUS' ENTERED AT 11:13:56 ON 08 DEC 2006 13 SEA ABB=ON PLU=ON L56 NOT L60 L63

FILE HOME

FILE REGISTRY

Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 7 DEC 2006 HIGHEST RN 915067-95-7 7 DEC 2006 HIGHEST RN 915067-95-7 DICTIONARY FILE UPDATES:

New CAS Information Use Policies, enter HELP USAGETERMS for details.

TSCA INFORMATION NOW CURRENT THROUGH June 30, 2006

Please note that search-term pricing does apply when conducting SmartSELECT searches.

REGISTRY includes numerically searchable data for experimental and predicted properties as well as tags indicating availability of experimental property data in the original document. For information on property searching in REGISTRY, refer to:

http://www.cas.org/ONLINE/UG/regprops.html

· FILE HCAPLUS

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FILE COVERS 1907 - 8 Dec 2006 VOL 145 ISS 25

FILE LAST UPDATED: 7 Dec 2006 (20061207/ED)

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FILE MEDLINE

FILE LAST UPDATED: 7 Dec 2006 (20061207/UP). FILE COVERS 1950 TO DAT

In preparation for the annual MEDLINE reload, the National Library o Medicine (NLM) has suspended delivery of regular updates as of Novem 15, 2006. In-process and in-data-review records will resume deliver on November 21, 2006, and will continue to be added to MEDLINE until December 17, 2006.

On December 17, 2006, all regular MEDLINE updates from November 15 t December 16 will be added to MEDLINE, along with 2007 Medical Subjec Headings (MeSH(R)) and 2007 tree numbers.

The annual reload will be available in early 2007.

This file contains CAS Registry Numbers for easy and accurate substance identification.

FILE EMBASE

FILE COVERS 1974 TO 7 Dec 2006 (20061207/ED)

EMBASE has been reloaded. Enter HELP RLOAD for details.

EMBASE is now updated daily. SDI frequency remains weekly (default) and biweekly.

This file contains CAS Registry Numbers for easy and accurate substance identification.

FILE BIOSIS

FILE COVERS 1969 TO DATE.

CAS REGISTRY NUMBERS AND CHEMICAL NAMES (CNs) PRESENT FROM JANUARY 1969 TO DATE.

RECORDS LAST ADDED: 6 December 2006 (20061206/ED)

FILE DRUGU

FILE LAST UPDATED: 7 DEC 2006 <20061207/UP>

>>> DERWENT DRUG FILE (SUBSCRIBER) <<<

>>> FILE COVERS 1983 TO DATE <<<

>>> THESAURUS AVAILABLE IN /CT <<<

FILE BIOTECHNO

FILE LAST UPDATED: 7 JAN 2004 <20040107/UP>
FILE COVERS 1980 TO 2003.

- >>> BIOTECHNO IS NO LONGER BEING UPDATED AS OF 2004 <<<
- >>> SIMULTANEOUS LEFT AND RIGHT TRUNCATION AVAILABLE IN /CT AND BASIC INDEX <<<

FILE VETU

FILE LAST UPDATED: 02 JAN 2002 <20020102/UP>

FILE COVERS 1983-2001

FILE DRUGB

>>> FILE COVERS 1964 TO 1982 - CLOSED FILE <<<

FILE LIFESCI

FILE COVERS 1978 TO 10 Nov 2006 (20061110/ED)

FILE SCISEARCH

FILE COVERS 1974 TO 7 Dec 2006 (20061207/ED)

SCISEARCH has been reloaded, see HELP RLOAD for details.

FILE JAPIO

FILE LAST UPDATED: 20 NOV 2006

<20061120/UP>

FILE COVERS APRIL 1973 TO JULY 27, 2006

>>> GRAPHIC IMAGES AVAILABLE <<<

>>> NEW IPC8 DATA AND FUNCTIONALITY NOW AVAILABLE IN FILE JAPIO... SEE HELP CHANGE

AND

http://www.stn-international.de/stndatabases/details/ipc_reform.html <

FILE PASCAL

FILE LAST UPDATED: 4 DEC 2006 <20061204/UP>

FILE COVERS 1977 TO DATE.

>>> SIMULTANEOUS LEFT AND RIGHT TRUNCATION IS AVAILABLE IN THE BASIC INDEX (/BI) FIELD <<<

FILE JICST-EPLUS

FILE COVERS 1985 TO 4 DEC 2006 (20061204/ED)

THE JICST-EPLUS FILE HAS BEEN RELOADED TO REFLECT THE 1999 CONTROLLED TERM (/CT) THESAURUS RELOAD.

FILE BIOENG

FILE LAST UPDATED: 20 NOV 2006 <20061120/UP>

FILE COVERS 1982 TO DATE

>>> SIMULTANEOUS LEFT AND RIGHT TRUNCATION AVAILABLE IN THE BASIC INDEX <<<

FILE VETB

FILE LAST UPDATED: 25 SEP 94 <940925/UP>

FILE COVERS 1968-1982

FILE WPIX

FILE LAST UPDATED:

4 DEC 2006 <20061204/UP> 200678 <200678/DW>

MOST RECENT THOMSON SCIENTIFIC UPDATE: 200678

DERWENT WORLD PATENTS INDEX SUBSCRIBER FILE, COVERS 1963 TO DATE

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http://scientific.thomson.com/media/scpdf/ipcrdwpi.pdf

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FILE MARPAT

FILE CONTENT: 1961-PRESENT VOL 145 ISS 22 (20061201/ED)

SOME MARPAT RECORDS ARE DERIVED FROM INPI DATA FOR 1961-1987

MOST RECENT CITATIONS FOR PATENTS FROM MAJOR ISSUING AGENCIES (COVERAGE TO THESE DATES IS NOT COMPLETE):

US 20060234956 19 OCT 2006
DE 102005016345 12 OCT 2006
EP 1710237 11 OCT 2006
JP 2006282618 19 OCT 2006
WO 2006108879 19 OCT 2006
GB 2424583 04 OCT 2006
FR 2884252 13 OCT 2006
RU 2284857 10 OCT 2006
CA 2500558 10 SEP 2006

Expanded G-group definition display now available.

FILE STNGUIDE

FILE CONTAINS CURRENT INFORMATION.

LAST RELOADED: Dec 1, 2006 (20061201/UP).